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ABSTRACT

The overall purpose of the study was to examine differentiated staffing practices and to explore their potential for Alberta schools. The study had four major phases. The first was to review the literature on differentiated staffing to determine rationales for it, alternative definitions and conceptualizations, recommended practices, expected outcomes, approaches to evaluation, and findings on the implementation of differentiated staffing and the use of paraprofessionals. The second phase used two surveys to determine the status of the practice in Alberta. In phase three, information on the staffing practices of each of ten schools was collected. The purpose of this phase was to determine intended and actual educational outcomes; workload and attitudes of staff members and the relationships among the various types of staff; administrative practices and problems; programs available and recommended; instructional processes utilized and clarity of role prescriptions and role performances, particularly in relation to the "teaching" function; differences in manpower supply and utilization of staff; and suggested guidelines for implementing the staffing practices encountered. The fourth phase was concerned with recommendations and implications based on the findings from the earlier phases. (Author/IRT)

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ED135098

SCHOOL STAFFING PRACTICES

AN EXAMINATION OF CONTINGENCY STAFFING AND THE POTENTIAL FOR STAFF DIFFERENTIATION IN ALBERTA SCHOOLS

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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FOREWORD

In June, 1975 the Honorable Minister of Education, Mr. Julian Koziak, approved a study to examine differentiated staffing practices and to explore their potential for Alberta schools. This document reports the findings of that study and presents recommendations based on these findings.

ACKNOWLEDGEMENTS

The cooperation of a great number of persons was required to design and conduct the present study. The research team wishes to use this medium to thank all the individuals who assisted with the planning, the literature search, the data gathering and analysis, the preparation of drafts of this report, and the typing and technical aspects associated with preparing the final document.

Specifically, we wish to express our gratitude to the three members of the Technical Committee, namely, Mr. N. J. Chamchuk, Director of Communications, Alberta Education, Dr. M. T. Sillito, Coordinator of Professional Development, Alberta Teachers' Association, and Mr. J. E. Anderson, Executive Assistant in Educational Services, Alberta School Trustees Association; to the Secretariat headed by Dr. W. P. Eddy of the Planning and Research Branch, Alberta Education; to Dr. T. Sergiovanni, Professor of Educational Administration and Supervision, University of Illinois; and to Dr. B. Pickard of Alberta Advanced Education and Manpower for their assistance with the overall design of the study.

Through the efforts of Mrs. Christiane Prokop of the Department of Educational Administration, computer programs were prepared and statistical analyses performed on the questionnaire data. The study team is grateful for this assistance.

Several Master's and Doctoral students enrolled in the Department of Educational Administration, The University of Alberta, during 1975 and 1976 participated actively in the detailed planning, data collection, analysis and reporting associated with the various phases of the study. These were: Messrs. Derek Allison, Derek Baker, Mervyn Batchler, Brian Caldwell, Warren Fisher, Terry Keleher, Daniel Magnan, Anthony Marshall, Jean Seguin, Dale Somerville, Brian Woolmer, and Douglas Weir. In addition, class members from the Educational Administration 506, 511 and 512 courses of The University of Alberta's Spring Session, 1976, assisted with the interpretation and analysis of the data. Sincere thanks are expressed to all of these individuals.

Alberta superintendents of schools, principals and teachers are thanked for completing questionnaires on the staffing patterns in use in their schools and on the potential for Differentiated Staffing in Alberta.

We are very grateful for the cooperation and assistance of the staff members and students in the ten schools chosen for on-site visits: M. E. LaZerte Composite High School, Thorncliffe Elementary School and Westbrook Elementary School in the Edmonton Public School District and The Activity Centre for handicapped children in Edmonton; Calling Lake School in the Northland School Division; Sir Alexander Mackenzie Elementary School in the St. Albert Protestant School District; Bishop Kidd Junior High School and St. Mary's School in the Calgary Roman Catholic Separate School District; Strathcona-Tweedsmuir Private School in Okotoks; and Winston Churchill High School in the Lethbrdige Public

School District. Thanks are also extended to the Superintendents of Schools, School Boards and Central Office staffs of the jurisdictions within which these ten schools lie, for permission to conduct the on-site visits and for reacting to drafts of the school descriptions.

Officers of the Alberta Department of Education, The Alberta Teachers' Association and The Alberta School Trustees Association are thanked for their willing cooperation in granting interviews on the legislation, policies and politics associated with staffing schools.

Finally, assistance with the technical details and typing was provided by several individuals. In particular, the study team gratefully acknowledges the help given by Mr. C. T. van Soest, Mrs. Hazel Brown, Mrs. Pauline Klinck, Miss Carole Matheson, Mrs. Judy McKinney, Miss Heather Poole, Miss Ruth Tuck, and Ms. Joyce Verkerk of the Department of Educational Administration's office staff and Mr. Jack Smith of the University's Printing Services. Our sincere thanks are also extended to Mrs. Margaret Voice for her efficiency in typing the final manuscript.

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CHAPTER 1

SCOPE OF THE DIFFERENTIATED STAFFING STUDY

The staffing of schools, both in terms of the numbers and types of personnel utilized, and of the staffing structure employed, continues to be a topic of interest and debate in educational circles. While the addition of such positions as department head and guidance counsellor to those of principal and teacher has brought an increased specialization in function, the development of a teacher hierarchy related to instruction is still the exception within Canadian schools.

The introduction of team-teaching, variable group size for instruction and open-area teaching space rekindled discussion on staffing practices. In addition, suggestions of writers such as J. Lloyd Trump, who proposed horizontal differentiation of function, and Dwight Allen who recommended vertical teaching hierarchies, stimulated many schools and systems to reexamine their staffing practices.

Other factors which have highlighted deployment of teachers include the increasing numbers of trained and untrained personnel, both paid and volunteer, who now work in schools, the emphasis on individualization of instruction, the growing professionalization of teachers, and economic conditions which have constrained school board budgets.

Not surprisingly, staffing practices which have evolved in different schools, in the different parts of the province and nation, vary greatly. No systematic or uniform approach seems to be developing. Instead, particular staffing practices suited to particular needs and interests are in evidence. Each staff organization seems to be in some ways unique and may be contingent on factors such as the nature and maturity of the student clientele, the availability and varying capabilities of the staff,

the physical facilities and financial resources available, and the extent of support and the demands of the community. Staffing contingent on the great host of internal and external variables affecting the school would seem to be the rule. Whether such contingency staffing is the most effective approach to selecting and organizing school staffs is a question which the research team faced early in the study. This report attempts in some measure to address the question and, in the last chapter, to give particular attention to this issue.

Design of the Study

The overall purpose of the study was to examine differentiated staffing practices and to explore their potential for Alberta schools. The study had four major phases:

1. Review of the literature on differentiated staffing;
2. Determination of the extent of differentiated staffing practices in Alberta schools and school systems;
3. Description of staffing practices in ten selected schools; and
4. Generation of recommendations and implications.

Phase 1: Literature review. This phase involved a compilation, review and critique of the relevant literature on differentiated staffing in its various forms at the early childhood and basic education levels to determine (a) the rationales for differentiated staffing, (b) alternative definitions and conceptualizations, (c) recommended practices, (d) expected outcomes, (e) approaches to evaluation, and (f) findings on the implementation of differentiated staffing and the use of paraprofessionals.

The literature review was divided into two parts with one examining differentiated staffing in general, and the other concentrating on differentiated staffing practices in Canada with particular attention to the deployment of paraprofessionals.

Phase 2: Status of differentiated staffing in Alberta. This phase of the study surveyed the status of differentiated staffing and closely-related practices such as the use of paraprofessional personnel, teacher aides, and other certificated and non-certificated personnel, both volunteer and paid, in the schools of Alberta. The data also identified several schools for closer examination at a later stage in the study.

Two surveys were used to obtain the necessary data. A preliminary survey of superintendents sought information on categories and numbers of staff in their jurisdiction and invited them to nominate schools with non-traditional staffing practices. A more detailed questionnaire survey of a sample of Alberta schools and school staffs returned specific staffing information as well as teacher attitudes towards alternative staffing practices.

Also included in this phase was an examination of the legislation and policies on staffing, and a comparison of opinions concerning differentiated staffing held by officers of three provincial organizations, Alberta Education, the Alberta Teachers' Association and the Alberta School Trustees Association.

Phase 3: School descriptions. For each school, information on the staffing practices was collected by means of interview, questionnaire, observation, and analysis of documents. The purpose was to determine (a) intended and actual educational outcomes in the selected schools, (b) workload and attitudes of staff members and the relationships among the various types of staff, (c) administrative practices and problems, (d) programs available and recommended, (e) instructional processes utilized and clarity of role prescriptions and role performance, particularly in relation to the "teaching" function, (f) differences in manpower supply and in utilization of staff, and (g) suggested guidelines for implementing the staffing practices encountered.

Phase 4: Generating recommendations and implications. This section of the study used the findings of the preceding sections as a basis for generating recommendations and implications. Possible future developments in differentiated staffing practices in Alberta are presented, and attention is given to elements critical to and possible strategies for successful implementation.

Outline of the Report

The second chapter is a report on Phase 1, the review of the literature on differentiated staffing. Chapter 3 presents the findings of the survey of Alberta superintendents. The information from the questionnaires to principals and teachers is contained in Chapter 4. Chapter 5 provides an outline of provincial legislation and the policies and opinions of three provincial organizations: Alberta Education, the Alberta School Trustees Association, and the Alberta Teachers' Association. Reports of staffing practices in the ten selected schools are contained in Chapter 6. The final chapter presents a summary of the study findings, and the conclusions and recommendations concerning the implementation of differentiated staffing in Alberta.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The purpose of this chapter is to present an overview of current thought and practice on the subject of differentiated staffing as reported in a wide variety of sources including books, journal articles, unpublished documents, and research reports. Although the review is not exhaustive in the sense that not all possible sources were examined, the search was continued until additional materials only duplicated ideas and reports of practices already on hand. All background materials used are listed in the bibliography of this report.

Differentiated staffing is reviewed under six major headings: the concept, in terms of definitions and rationales; current practices, including the historical background; evaluation of differentiated staffing ranging from opinion surveys to examinations of learning outcomes; cost considerations; implementation of differentiated staffing; and, the Canadian experience with differentiated staffing, paraprofessionals, and volunteer aides. The final section of the chapter presents a summary of the conclusions which result from the review of literature.

CONCEPTS OF DIFFERENTIATED STAFFING

As is true for most recent innovations in education, the concept of differentiated staffing takes various shapes and forms. The term is used widely by proponents for change in the organization of schools; however, the definition of the concept appears to vary considerably. In spite of these variations the essential characteristics of differentiated staffing are discernible through a review of selected definitions and the rationales on which differentiated staffing models are based.

Definitions

Differentiated staffing is, in essence, an organizational attempt to improve instruction through reorganization of the teaching functions within a school so that together certificated and non-certificated personnel perform all functions traditionally assigned to the classroom teacher. This approach to organizing schools differentiates among personnel on the basis of responsibility, function, skill and, sometimes salary.

The literature on the subject reveals that there is a lack of agreement on the essential characteristics of this organizational form. Depending on the objectives of the writer, certain aspects of differentiated staffing have received more emphasis or explanation than others. The National Education Association (1969:2) in a position statement on differentiated staffing, defined it as:

> . . . a plan for recruitment, preparation, induction, and continuing education of staff personnel for the schools that would bring a much broader range of man-power to education than is now available.

Some broader implications of the concept were emphasized by Cooper (1972:1) when he stated that: "Staff differentiation in its full meaning recognizes the necessity for concurrent changes in scheduling, curriculum, decision-making power, and individualization of instruction."

Although hierarchical structure is not always included in general definitions, Allen (1967:21) stressed the development of a teacher hierarchy as essential:

> . . . fundamental to the differentiated teaching staff I propose is a four-level structure within which both the level and the kinds of teaching responsibility can be assigned and rewarded in keeping with identified educational functions, and professional needs.

Similarly English (1969:9) indicated the establishment of a career ladder for teachers in his definition:

> Inherent in a plan of differentiated staffing on the basis of responsibility is the decentralization of decision-making, the creation of new teacher roles, flexibility, and the establishment of new career plans for teachers.

From such specific definitions it is possible to develop a broader explanation of the concept. An inclusive description of differentiated staffing, therefore, would seem to contain the following aspects:

1. a career ladder for teachers which would allow them to remain in direct contact with classroom instruction while furthering their educational careers;

2. a more professional and manageable teaching function, with teacher skills and qualifications linked to instructional responsibilities;

3. a collegial structure for decision-making, goal-setting and evaluation on all school-related matters;

4. a salary schedule with emphasis on instructional responsibilities rather than on seniority; and,

5. a flexible instructional pattern which might vary greatly but would include the services of consultants and paraprofessionals, and which would stress the improvement of instruction.

That this definition is all-inclusive and may not describe actual practice was stressed by Allen (1972:15) when he commented that:

> There is no such thing as differentiated staffing. That is, there is no single, tangible, recordable model that encompasses and exhausts what is potential within the concept. . . . The notion of differentiated staffing offered a frame of reference, a habit of mind, a nontraditional perspective, a rationale, perhaps even a process by which a great number of specific patterns or models or practices may be devised, justified, and evaluated.

As is indicated in subsequent sections of this review, different models of differentiated staffing have emphasized different characteristics and have combined them in different ways. Similar variations can be identified in the reasons why schools or school systems give consideration to implementing differentiated staffing as well as in the rationales put forward by the proponents of this approach to organizing instructional personnel.

Rationales

The concept of differentiated staffing is based on two premises:

1. teachers differ in the level of teaching skills and in the extent of their commitment to the profession; and,

2. teaching is a global concept which contains both instructional and non-instructional functions.

Recognition of these variations in teacher characteristics and of the multidimensional nature of teaching tasks suggests that it might be advantageous to provide for greater specialization among instructional personnel than is usually possible under more traditional forms of staffing.

Differentiation, therefore, encourages specialization not only in terms of the quality and extent of the skills used but also in terms of the actual functions included in "teaching." Gagné (1965) has suggested that teacher functions might be broadly classified as:

1. writing learning objectives;

2. deciding on curriculum content to be included;

3. motivating;

4. deciding on learning environment;

5. providing for instruction-learning transfer; and,

6. evaluating.

Differentiation might be based on specialization according to these functions or alternatively, teachers might be divided on the basis of the instructional mode: direct individual instruction, large group instruction, small group seminars, laboratory work, individual study, or prepared curriculum packages. On the other dimension, teaching functions may be allocated to a wide range of educational personnel from specialists to aides.

Cooper (1972:2-3) listed six major reasons why differentiated staffing had become a vital topic of interest in schools and colleges. He suggested that the knowledge explosion of the 1950's and 1960's had shattered any pretence that teachers could be competent in all the areas and techniques of instruction and could perform all the tasks traditionally demanded of them. Hence, a system which would allow for a reorganization of roles was welcomed.

Another stimulus for exploring alternatives was the escalating cost of education to the taxpayer which emphasized the need for a revision of the traditional single salary schedule. The first discussions were on merit pay which is an attempt to reward some teachers over other teachers for performing more competently at the same tasks. Differentiated staffing suggested that teachers be paid according to responsibilities instead of providing annual increments to all teachers regardless of competency or duties performed, and, as such, became an important alternative for school boards.

The necessity of considering other means of allocating financial resources also led school board members to consider hiring paraprofessionals so that teachers might be able to spend their time doing the professional tasks for which they were trained.

About this same time the general societal concern with the standard of instruction in schools, the type of curriculum and the lack of emphasis on the individual student encouraged discussion of alternative staffing patterns which would facilitate innovations. Another issue discussed within the context of differentiated staffing concerned teachers' demands for an increased share of the decision-making power in the schools. Support for these demands was found through consideration of the participatory decision-making feature in differentiated staffing models.

The area of teachers' professional development, long neglected in schools, was highlighted by the need for introduction of new curricula

and instructional packages which demanded different teacher competencies. The utilization of differentiated staffing allowed for the selection of teachers most interested in implementing new programs and also placed substantial emphasis on the upgrading of teachers' skills through in-school training and collegial evaluation.

Rationales such as these, and discussion of the concept in general, have resulted in a number of attempts to implement differentiated staffing in schools and school systems in both Canada and the United States.

DIFFERENTIATED STAFFING IN PRACTICE

Organizational models which have attempted to implement differentiated staffing have been many and varied, in part due to the range of objectives drawn up for the individual model, but also due to the range of pressures for differentiated staffing which have been variously prominent since the advent of the present concept in the early 1960's. These are more evident when consideration is given to the evolution of the concept.

Historical Perspective

The genesis of the idea of redistributing the responsibility of the teacher was probably the Lancastrian monitorial system of the early 1800's, but it was not seriously considered as a staffing pattern in education until Lieberman (1960:95-100) developed a similar model in the early 1960's. His differentiated staffing model was based on a medical paradigm with some teachers holding Ph.D. degrees and being equivalent to "doctors" and the remaining "nurse" teachers holding bachelor degrees. His rationale for developing such a model was to encourage higher entry standards into the teaching profession and to provide incentives for teachers to remain in the classroom.

Lieberman's model was used as the basis for two other early models of differentiated staffing. The Head Start model had two levels: the lead teacher, who received an extra stipend, and the assistant teacher. The model was the first to suggest that teachers be paid according to their responsibilities.

The Trump model (1967) which was used in the Model Schools project presumed several levels of function and competence with a horizontal organization at each of the three levels. The first level was the administrative level which included the principal, assistant principal(s), building administrator, and activities director. A second level was the teaching level, with collegial teaching teams, while the third level was the assistant level, with instructional assistants, clerical assistants, and general aides. As early as 1959, Trump had recommended that secondary schools reorganize their teaching staffs along differentiated lines to include professional teachers, instructional assistants, clerks, various kinds of aides, community consultants, and staff specialists.

First Generation Models

The major impetus towards differentiated staffing was provided by Dwight Allen who had developed a model of a four-step hierarchy in 1965 (Figure 2.1). This model was first implemented in three schools in Temple City, California in a re-defined form in 1967/68 (Figure 2.2) and, due to cost factors, in a further modified form in 1969 (Figure 2.3). Caldwell (1972), in describing the differentiated staffing pattern of Temple City schools, listed eleven essential characteristics: multiple salary schedules, professional self-regulation, shared decision-making, flexible scheduling, emphasis on maximum growth of learner, independent study programs, intrinsic rather than extrinsic motivators, co-operation, decentralized control of resources, student involvement, and an approach to change as a multi-faceted endeavour.

The Temple City Model was implemented with minor variations in two Kansas City, Missouri, schools in September 1968, and at three Beaverton, Oregon, schools in 1969.

A common feature of these models was the emphasis on a hierarchy of well-defined teacher roles which allowed for specialization and division of labor, and which included the use of aides and paraprofessionals. Reasons for their implementation were basically economic, with stress on increased school board control over staffing costs, the expansion of the pool of available teaching talent, the elimination of automatic promotion regardless of competence, and the provision of federal funding. English (1972:70) has referred to these models as Generation I models.

Second Generation Models

The Sarasota, Florida school district began implementing a differentiated staffing model which had been developed by Pillot (1970), in four pilot schools in 1970-71. The necessity of fitting the model to the unique philosophy, goals, needs and objectives of each school was stressed. Pillot's paradigm consisted of two sub-sets: (1) a staffing model based on horizontally differentiated tasks in four broad areas—instruction, administration, development, and in planning, research, evaluation and reporting, and (2) an implementation model which provided for the vertical differentiation of staff with the number of staff in each category being allocated on a county-wide formula. It called for four levels of teachers and three of paraprofessionals. All personnel spent a specified percentage of their time doing each of the four staffing functions; for example, the principal spent 55 percent of his time in administration, 20 percent in research, 15 percent in staff development, and the remaining 10 percent in instruction. A set of basic job specifications which would act as guidelines for the selection, performance, and evaluation of staff was also developed.

On the basis of an evaluation of the Temple City and Sarasota models, English (1972) suggested a differentiated staffing model based on the identification of pupil needs within a particular school. Zaharis

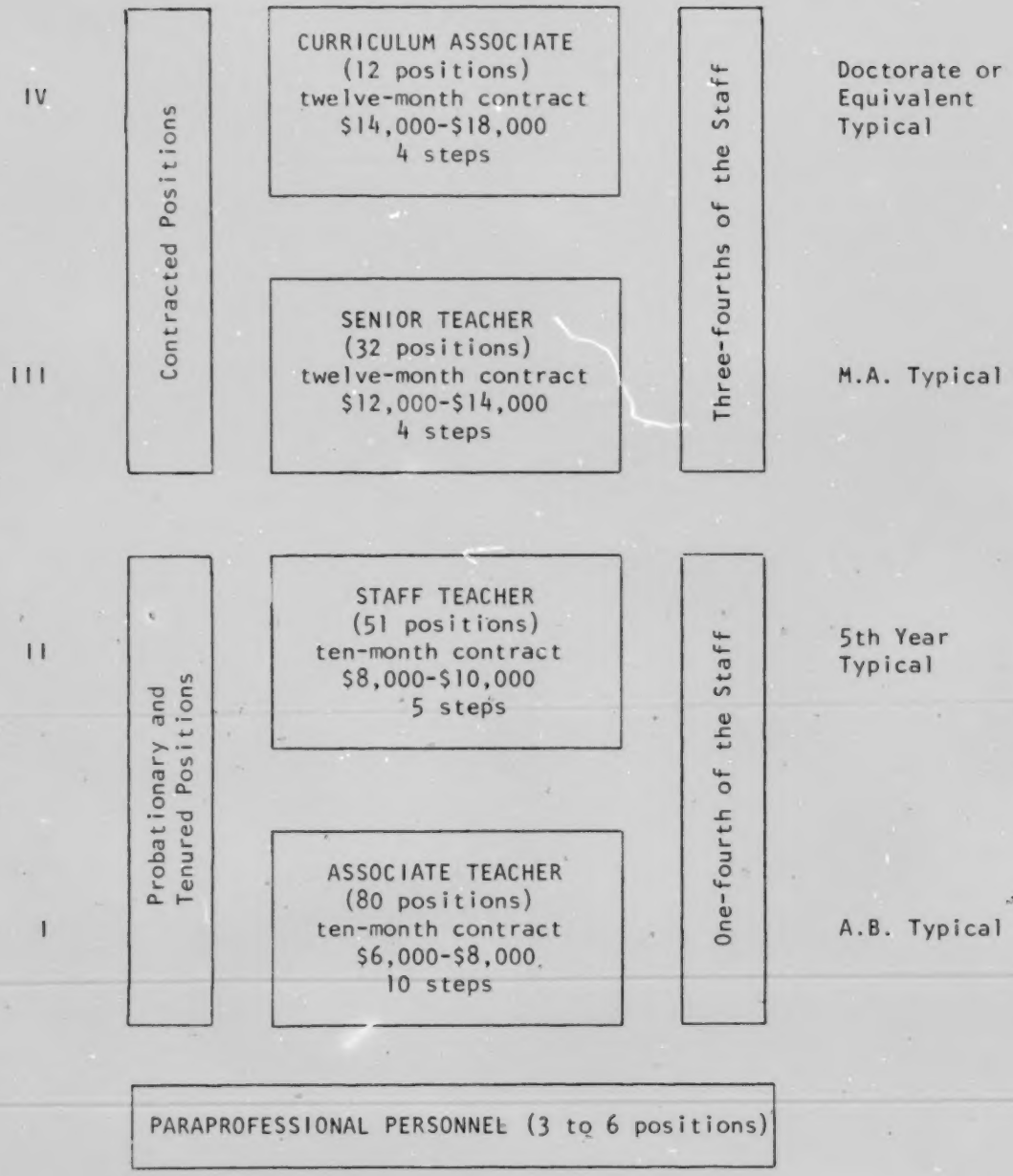

Figure 2.1

Temple City Differentiated Staffing Plan
1965-66 (Model 1 - Dwight Allen)

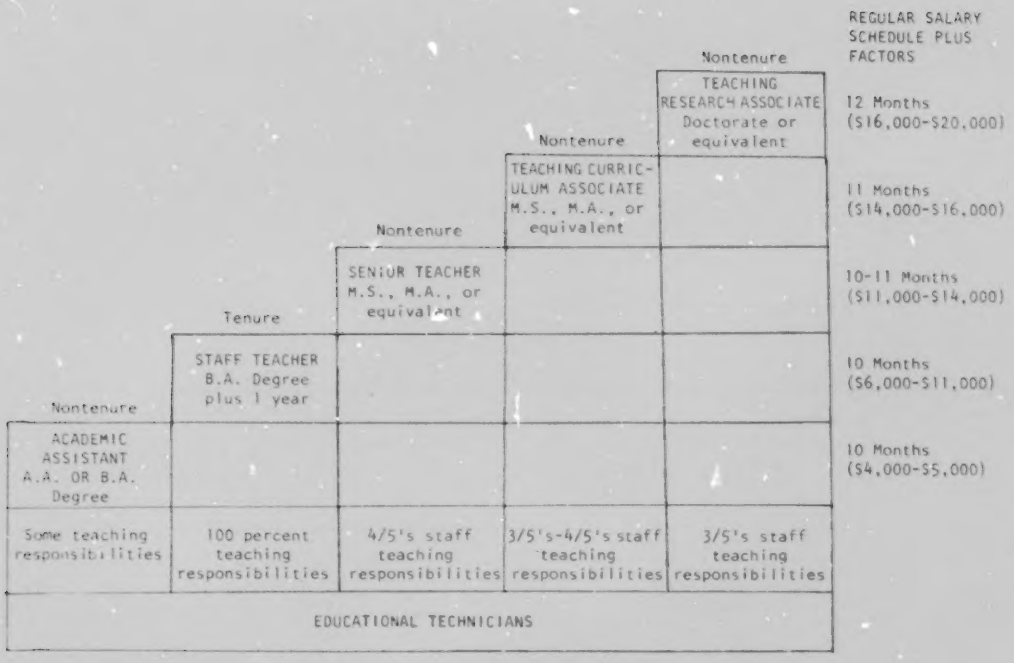

Figure 2.2

Model of Temple City Differentiated Staffing Plan
1967-68 (Model 2)

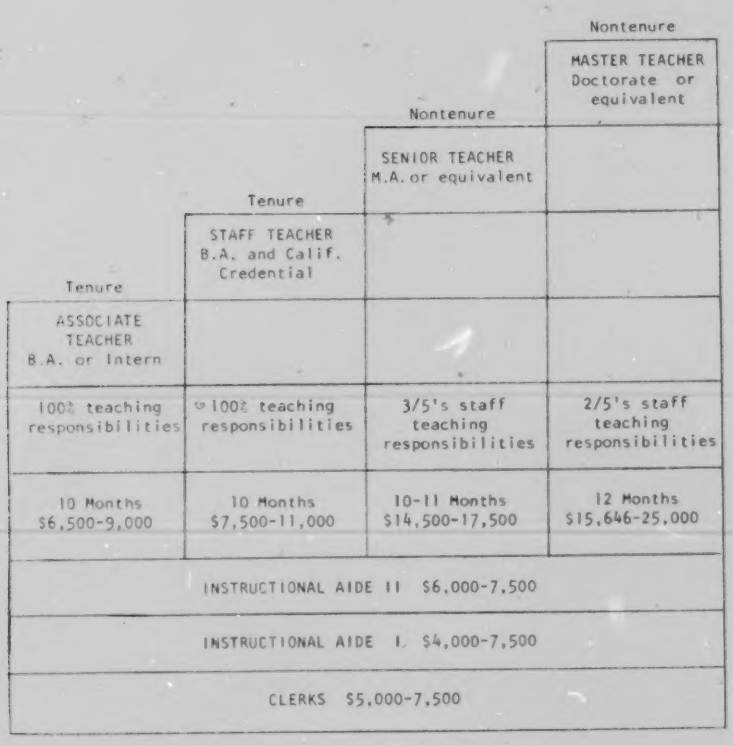

Figure 2.3

Temple City Differentiated Staffing Plan
1969-71 (Model 3)

(1972:262) described such a model as one where:

> Teaching tasks are related to pupil needs via an on-going needs assessment of pupils. Roles are differentiated horizontially, but they do not assume a hierarchy until a specific set of objectives—the learning situation—and time-frame are established. The scheme also allows for the formation and re-formation of various sub-hierarchies. At expiration of the time-frame (which is in the form of a performance contract) any rank of position reverts to a horizontal position until a new set of objectives in a new time-frame has been negotiated and accepted.

This model was implemented in three selected pilot schools in Mesa, Arizona and is similar to the conceptual model of an instructional learning process which would differentiate instructional functions in terms of learning processes developed by Moss (1973). His model, which was based on Kaufman's system design paradigm, was presented as providing for six major functions: identification of the problem, determination of solution requirements and solution alternatives, selection of strategies and tools, implementation, determination of performance effectiveness, and revision as required.

In assessing the development of differentiated staffing English (1972:109) suggested that:

> . . . If our study and experimentation of staffing patterns ends with Generation II, we may have merely created a system whereby improved learning can take place, but by which it can not be guaranteed with any certainty or predictability.

He advocated further development of a sound psychological basis for differentiated staffing, with much more emphasis on the teaching style of the teachers and the learning needs and learning style of the students. Such Generation III models would include greater participation by students in the decision-making process and in all aspects of the instructional mode.

Models in Practice

The development of the Temple City, Sarasota, and Mesa models of differentiated staffing owe much to the provision of United States funding under the Education Professions Development Act. The funding provisions in turn shaped the models in that guidelines for grantees (Charters et al., 1973:18) stated that (1) no unit smaller than an entire school staff should be differentiated; (2) the maximum salary of the highest paid teacher should be at least double the maximum salary of the lowest category of professional personnel; (3) all instructional staff should spend at least 25 percent of their time in direct contact with pupils; (4) all instructional staff in the unit designated operationally differentiated should be on the differentiated salary schedule; (5) the differentiated roles of the instructional staff as well as the selection

criteria for those roles should be clearly delineated; and (6) differentiated staffing normally should be accompanied by other organizational and curriculum changes and by the development of new, specialized teaching roles.

Only a limited number of studies have been completed on the extent to which differentiated staffing has been implemented and the forms which it has taken in various school systems. In one survey, Christensen (1970) was able to identify only fourteen schools which positively utilized differentiated staffing after he contacted the state departments of education in each of the fifty states.

On the basis of information provided by principals of these fourteen schools, he concluded that most models had four steps of certified personnel engaged in teaching, most schools had established or were establishing pay differentials, most schools reported no difficulty in recruiting teachers, and a majority of schools reported that per pupil costs either remained the same or increased with differentiated staffing. The principals also reported that student, teacher, and community attitudes toward the change to differentiated staffing were mainly favorable.

Although relatively few studies have been completed on the extent to which differentiated staffing has been implemented, the literature is replete with descriptions of specific differentiated staffing projects. While these differed in the size and grade level of the school, in the extent of differentiation implemented, and in the numbers of personnel employed, there were some common features in various projects.

The components of twenty differentiated staffing projects are identified in Table 2.1. Only two components, team teaching and use of paraprofessionals, were common to all projects. Nineteen of the projects had developed teacher hierarchies; four-level or two-level hierarchies occurred more frequently than did three-level hierarchies. Flexible scheduling was associated with more of the projects (fifteen) that were either individualized instruction (nine) or non-grading (seven). In eleven projects, the staffing innovation was associated with an open-area or multi-unit organization.

Although fourteen of the projects had shared decision-making and nine had cooperative evaluation, only four appeared to involve a faculty senate. Of particular interest is that only five of these projects appeared to have a differentiated salary schedule.

In terms of the extent of implementation of these components, the Kansas City and Temple City projects appeared to have the most in number including differentiated salaries. The Scottsdale, Laguna Beach and Denver projects followed closely behind but did not appear to have differential salary provisions.

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Table 2.1

Components of Selected Differentiated Staffing Models

Province; State School or District	Component													
	Team Teaching	Para-professionals	Flexible Scheduling	Individual Instruction	Non-grade	Open area pod, multi-unit	Shared Decision Making	Co-operative Evaluation	Faculty Senate	Salary Increments	Differentiated Salary	Teacher Hierarchy Level 4	Teacher Hierarchy Level 3	Teacher Hierarchy Level 2
Alberta														
Bishop Carroll	X	X	X	X	X									X
British Columbia														
Kamloops	X	X		X	X	X	X		X					X
Peace River	X	X				X								X
Arizona														
Mesa	X	X	X				X	X		X			X	
Scottsdale	X	X	X	X	X	X	X	X					X	
California														
Fountain Valley	X	X	X			X								X
Laguna Beach	X	X	X	X	X	X	X	X				X		
Marin Cty.	X	X	X	X		X	X					X		
Temple City	X	X	X	X		X	X	X	X		X	X		
Colorado														
Denver	X	X	X	X		X	X	X		X				X
Florida														
Dade City	X	X	X			X	X	X			X		X	
Sarasota	X	X	X								X	X		
Kentucky														
Louisville	X	X	X				X				X		X	
Minnesota														
Bloomington	X	X	X		X	X	X					X		
Missouri														
Kansas City	X	X	X	X	X	X	X	X	X		X	X		
Nevada														
Clark Cty.	X	X												X
New Jersey														
Camden	X	X					X			X				X
North Dakota														
Grande Forks	X	X								X				
Oregon														
Beaverton	X	X	X	X			X	X				X		
Portland	X	X	X		X		X	X		X		X		

Summary

In spite of the substantial literature on the subject, the development of the concept and of specific models, and the numerous pilot projects, differentiated staffing has not been implemented extensively. Recent projects appear to be characterized by hierarchically structured teaching teams which include paraprofessional personnel. Other features commonly identified with differentiated staffing such as differentiated salaries may or may not be associated with any specific project.

At this time it is difficult to discern from the literature what trends, if any, there are in the development of models. The shape which models take in future is likely to be influenced by developments both within education and in the environment as well as by evaluations of current practices.

EVALUATIONS OF DIFFERENTIATED STAFFING

Evaluative studies of differentiated staffing have tended to consider four major areas: student achievement, learning environment, teacher and administrator satisfaction, and the cost factors involved in the operation of differentially staffed schools. Research on the first three areas is reviewed in this section of the report while the cost considerations, mentioned in some studies, are discussed more fully in the next section.

Academic Achievement

A study to determine the relative effects of differentiated staffing on elementary students' achievement was carried out by Pedee (1971). The research was carried out on a pilot project using differentiated staffing in the Beaverton public schools. Pedee's sample included fifth and sixth grade students and involved the three academic areas of reading, language, and arithmetic. He found that students in the project school did not differ significantly in achievement gains from those at control schools in the area of reading; however, gains in language for fifth grade project school students were found to be greater than for those in the control school. Gains for the fifth grade control group students in arithmetic were significantly greater than those of fifth grade students at the project school. He concluded that the results of his study were contradictory and inconclusive. One of the factors which might explain the results is the lack of special training for staff members who worked under differentiated staffing. Pedee suggested that special training should be developed to prepare teachers for the new arrangements of role, status and responsibilities.

A similar study was conducted by York (1973) in an attempt to determine the differences in academic achievement of elementary school children in grades four through six under differentiated and traditional

staffing patterns. His study included a total of 621 students in grades four, five, and six. The Iowa Test of Basic Skills was used to measure achievement; York concluded from the study that there was no significant difference in the academic achievement of the control and experimental groups.

Academic achievement was included in a study by Shapiro (1972) who carried out a case study of Norwood elementary school in order to determine the relative effectiveness of the program in meeting six selected objectives. He found the following:

1. academic achievement was not significantly better at Norwood than at selected control schools;

2. student morale was found to be positive;

3. parents supported the Norwood project;

4. morale of staff was positive;

5. staff sense of power was extremely high and degree of alienation was extremely low; and,

6. training procedures had a good effect on teachers and interns.

As a result of this study Shapiro concluded and recommended that Norwood should continue to implement its model of differentiation.

Learning Environment

A number of studies have focused more on changes in the learning environment and learning opportunities rather than directly on student achievement.

The purpose of a study carried out by Essig (1971) was to explore the effects of a project designed to experiment with the organizational structure of the elementary school. Two experimental and two control schools participating in an experimental differentiated staffing project in Oregon were used. Data were gathered by means of interviews, questionnaires, and the use of an attitude inventory. The analysis of the data revealed that the experimental schools were characterized by increased opportunities for students to be involved in determining their educational programs, greater number of collaborative teaching arrangements between staff members, additional involvement of non-classroom personnel with students, new techniques for reducing adult-student ratio, elimination of ability grouping practices, and creation of instructional units or teams with regular planning sessions. Questionnaire data showed that involvement of staff members in planning and development of curriculum had increased. Only one major difference in the attitudes of teachers was observed. The attitude of teachers in the experimental schools was significantly more positive toward the concept of change in schools. A

final conclusions was that the experimental schools had achieved success in improving learning opportunities for students through increased individualized instruction techniques.

Hestand (1973) reviewed the implementation of a pilot project in an elementary school. This review included an evaluation of the project with regard to student achievement and other factors. The differentiated staff and the outside consultant evaluation team agreed that the new organization provided a much improved learning environment over the traditional system. Although data were not treated rigorously, it was concluded that the differentiated staffing organization was superior to the traditional organization used in the school. Only one group of students showed an increase in academic achievement. The attitude changes of teachers and students were considered to be positive, and positive changes in individual items were viewed as important successes of the program. Indeed, the positive attitudes gained by the teachers and their knowledge and ability was seen as one of the strongest outcomes of the program. Hestand observed that differentiated staffing was used as a method to improve motivation, planning, and attitudes. On the basis of the evaluation, it was recommended that the entire school district should be organized according to the concepts of differentiated staffing.

Satisfaction of Teachers and Administrators

In an attempt to assess the effects of differentiated staffing, Mantzke (1973) studied the Individually Guided Education/Multi-unit School design in Wisconsin which is one model of differentiated staffing. The purpose of his study was to examine and to compare the effectiveness and satisfaction of principals who function within differentiated and undifferentiated organizational patterns. Mantzke found that teachers, principals, and superintendents working with differentiated schools expressed greater satisfaction with respect to supervision of instruction, curriculum development, student consultation and guidance, staff relationships, and securing and managing resources. Satisfaction was not significantly greater for student discipline and public relations. There was no significant difference in the effectiveness of principals under the two patterns. Mantzke concluded that differentiated staffing more adequately met the professed satisfaction needs of teachers, principals, and superintendents.

Another study of satisfaction with organizational expectations of differentiated staffing was carried out by Rottier (1971). His sample consisted of teachers from seven school districts which had implemented differentiated staffing. The areas of satisfaction which he studied involved personnel policies and staff utilization practices. The major finding in the study was that teachers functioning under differentiated staffing were more satisfied with regard to the following: involvement of staff in decisions, possibility of fulfilling career objectives, incentives for professional development, using teacher talents and abilities, organizational climate, and attraction and retention of personnel. The study showed that there were some differences between different categories

of teachers on the extent to which they were satisfied with differentiated staffing. For example, only teachers with a master's degree or above were more satisfied with differentiated staffing and high school teachers were more satisfied with differentiated staffing than were other groups. Rottier concluded that differentiated staffing did meet more adequately the needs of teachers; however, he observed that satisfaction varied with teacher sex, age, academic training, teaching experience, and level of teaching responsibilities.

In another evaluative study Skidmore (1971) conducted an empirical evaluation of a school system model of differentiated staffing during the initial year of operation. His study focused on determining opinions of staff and students toward the program as well as an evaluation of some components of the model. He concluded that the model possessed the qualities of autonomy and fluidity as was intended. Further, he discovered that teacher morale rose slightly during the year and that teachers approved of the concept of differentiated staffing but felt that more planning should have been done before the program was begun.

Three organizational approaches were compared by Hendrix (1973): differentiated staff, multi-unit school, and the traditional model on both dimensional or structural characteristics and process characteristics. Data on process comparison were gathered from responses to Likert's "Profile of Organizational Characteristics" instrument. The results of the study revealed that even though there were unique differences in each organization on structural characteristics there was little difference in the way teachers responded on the Likert instrument. Further, differences within the approaches were greater than differences between the approaches. He concluded that while schools are willing to change structural features they are less willing and able to make subsequent changes in important basic organizational beliefs, attitudes, and values that presently exist about the organization and administration of schools.

General Evaluations

Thompson (1971) reported on an evaluation of the differentiated staffing practices in the Grand Forks district. The differentiated staffing projects were referred to as islands; some of these were of a hierarchical pattern while others were composed of groups with no designated leader. All of the islands contained instructional or para-instructional personnel below the staff teacher level. The evaluation dealt with three variables: direct instructional cost, teacher attitude, and student cognitive achievement. Costs savings were measured by comparing costs of operating the islands against projected classroom costs for an equal number of children in a conventional classroom. Teacher morale was assessed by the administration of a teacher attitude instrument while student achievement was measured by standard achievement tests in grades two through eleven. In nine of thirteen islands the expected lower cost figure was not achieved during the initial year of operation in a differentiated staffing mode. The reasons for this were miscalculations in projecting enrolments and heavy start-up costs. None of the schools

using differentiated staffing reported lower teacher morale during the first year, and in none of the islands was the student achievement lower than in any of the control schools. The author concluded that although the islands did not achieve a reduction in costs as had been expected, it was of interest to note that teacher morale and student achievement were not affected negatively.

Another major evaluation project completed by personnel in the Evaluation Training Centre at Florida University has been described by DeBloois (1972). The theoretical basis for the study was a model developed by DeBloois which specified seven components essential to their definition of differentiated staffing (Figure 2.4). DeBloois states that:

> At a level of greater specificity, the model identifies the components of staff-use which relate to a staff member's regard for self (Individualism); the degree and quality of interpersonal interaction which exists (Collegiality); and the professional commitments which guide the actions of individuals on the staff (Professional Disposition). Also identified are the operations which enable the accomplishment of institutional goals such as communication, decision-making, and implementation of decisions (Workflow Structures); and the policies established to recruit, employ, train, retrain, and reward the instructional and support personnel required by the institutional mission (Perpetuation Structures). Finally the model describes the system an institution employs to monitor its goals of the program (Accountability).

Data on each of these components were collected within a developmental framework of differentiated staffing implementation. This framework had six aspects: goal analysis, process evaluation, model evaluation, installment plans evaluation, installment process evaluation, and summative (outcomes) evaluation.

Results from the eighteen differentiated staffing projects surveyed indicated that only six had actually utilized the services of paraprofessionals, emphasized individualized instruction, increased teacher participation in planning and decision-making, and had teacher responsibilities tied to differential salaries. In particular, DeBloois (1972:359) commented on the lack of emphasis on systems self-renewal and accountability. This lack of adequate feedback on implementation and roles attained has resulted in many projects replicating the errors of earlier implementation attempts and has inhibited the development of an adequate knowledge base from which to develop differentiated staffing.

Summary

When compared with the extent to which differentiated staffing has been implemented, the number of evaluative studies is noteworthy. However, the research which has been carried out does not provide an adequate base for future improvement and implementation decisions. English (1972:41) attributed the lack of more rigorously designed studies to the lack of

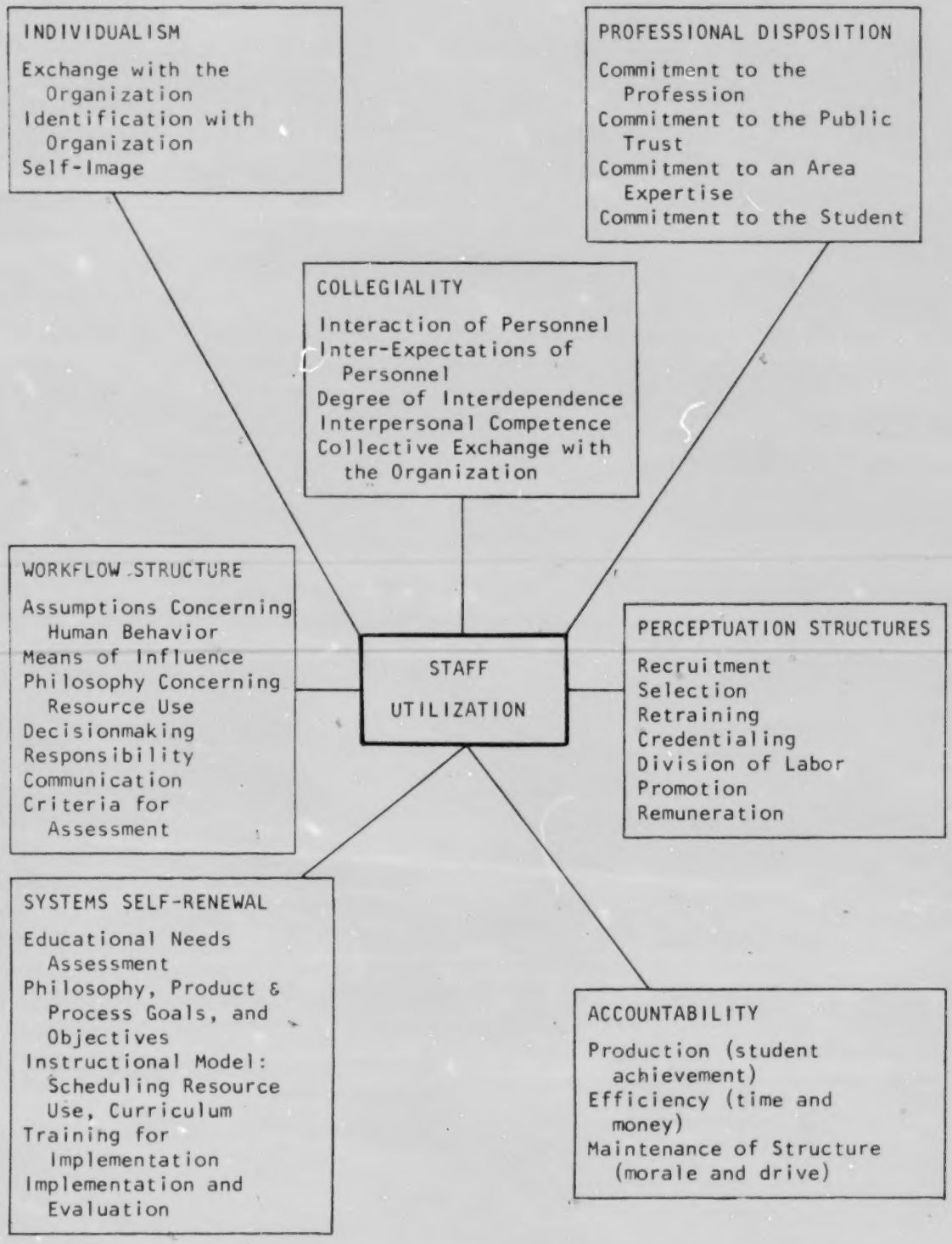

Figure 2.4

A Conceptual Model for Evaluating Organizational-Structural Innovations
DeBloois (1972:345)

theoretical models from which hypotheses might be generated, and suggested that until such theories have been constructed, differentiated staffing may have to be classified as a "broad-aim program" dependent on case studies and process-oriented qualitative research as devices for assessment.

If the studies reviewed do not provide a strong case for adoption of differentiated staffing, neither do they provide strong evidence of undesirable effects. Research into effects on student achievement is inconclusive; however, some assessments have resulted in the judgment that learning environments are improved. Teachers and administrators appear to be satisfied with the innovation. Although there were no reports of reduced morale in these studies, there are indications that this has been a factor in the discontinuance of some projects as reported in a later section.

COST CONSIDERATIONS

A review of several differentiated staffing projects would seem to indicate that the major costs lie in the planning, development, and early implementation of the differentiated staffing model. Once in operation, costs seem to be similar to those of a traditionally staffed school. However, the recency of the adoption of differentiated staffing, the impact of federal funding for projects in the United States and the development of programs specifically designed to keep costs within the same bounds as in a traditional school, have made comparisons difficult.

Two schools in the Kansas City district implemented differentiated staffing. Dempsey and Smith (1972:24) carried out a comparative analysis of costs in each school and in a traditional school of comparable size. While administrative, instructional and secretarial assistance costed out at approximately the same figure, the differentiated staffing pattern in each school cost approximately $15,000 more than traditional staffing patterns. This was accounted for almost entirely by the costs of para-professional services. Hair, the assistant superintendent of Kansas City, indicated the costs as follows (Hair and Wolkey, 1969:10):

> Although such a program may seem costly, there was a cost increase of only $19,987 in a $300,000 program compared with a traditionally elementary school of comparable size, and an increase of $17,678 in a $500,000 program compared with a traditional junior high school of comparable size.

In commenting on the program Harris (1970:32), an instructional co-ordinator at the junior high school, observed that problems in the implementation of the program were due in part to budget arrangements which had helped to limit the number of personnel at each step on the hierarchy.

The Education Professions Development Act (EPDA) co-ordinator for the Kansas City project, Simon (1972:255), also commented that the schools attempted to create a modern educational program without adequate financial support.

Swanson (1973) studied a number of on-going differentiated staffing programs to discover their conversion and operating costs. He examined data supplied by the following projects: Beaverton, Oregon; Camden, New Jersey; Cherry Creek, Colorado; East Windsor, New Jersey; Mesa, Arizona; The Minnesota Project; the Multi-unit School Program, University of Wisconsin R and D Center; Sarasota, Florida; and Temple City, California.

The Beaverton project reported an implementation cost estimate of $2-300,000. To assist in the transfer to differentiated staffing, the project received an EDPA grant of approximately $90,000 and a local district allocation of $40,000 (Dempsey and Smith, 1972:151-2). The Camden, New Jersey project co-ordinators estimated that in the first year of the project $300,000 went into management, training and systems analysis considerations. The total federal fund to implement the project was close to one million dollars (Dempsey and Smith, 1972:152-4).

Cost estimates for other projects which are given in Table 2.2 are derived from the report by Dempsey and Smith (1972:140-193). Although the table shows considerable variation in the additional funding available to schools, costs in the neighborhood of $100,000 per school per year for planning and the early stages of implementation would not appear to be far from the average. Of course, whether or not the funds are adequate will be determined by various factors.

As can be seen from Table 2.2, the majority of the United States differentiated staffing projects listed received federal funding for the planning and implementation stages. One project which relied mainly on district funds was the John Adams High School project. In a case history of the project, Dobbins, Parker and Wertheimer (1972:224) concluded:

> While the resources made available for the innovations Adams attempted to inaugurate (including differentiated staffing) were greater than those for many high schools, they were insufficient. The Portland Public Schools had budgeted for the planning team to work for a year before the school actually opened. The school was allocated additional staff and supplies for the first year in operation beyond what it might normally be granted, but all too soon found itself on a regular district budget, while laboring to develop new programs in staffing, training, and curriculum development. At Adams we initiated an array of changes because we assumed that if change was to be effective, it would have to be comprehensive. Considering the amount of additional resources necessary to mount such an operation, should a district launch major programs when revenue is limited? Our view is that a school system should not do so, unless there are substantial funds available for a long-time period.

Few, if any, projects appear to have been assured of the long-term funding necessary for effective implementation of an innovation such as differentiated staffing.

A study on the costs of implementing differentiated staffing was reported by Krumbein (1971). He obtained data from traditionally organized

Table 2.2

Cost Estimates for Implementation of Selected Differentiated Staffing Projects

Project	Cost Estimate	Number of Schools	Number of Pupils
John Adams H.S. Portland, Oregon	$250,000 over 4 yrs./ includes $150,000 for staff development	1	1,750
Annison, Alabama	$40,000 (planning only)	1	2,000
Dade County, Florida	$250,000 (planning only) (EDPA funding)	2	600 2,400
Kansas City, Missouri	$80,000 (specific development early implementation) (EDPA funding)	2	1,000
Louisville, Kentucky	$1,080,000 (EDPA $130,000 FOCUS $700,000 Career Opportunity $250,000)	14	11,000
Marin County Florida	$309,000 over 3 yrs. (EDPA funding)	11 (17 schools reduced to 11, June/71)	--
Sarasota, Florida	$200,000 (EDPA funding; State of Florida educational improvement funding)	6	5,500
Temple City, California	$100,000/yr. for 5 yrs. (private, state & EDPA funding)	6	5,000
Mesa, Arizona	(EDPA funding)	3	--

schools and from differentiated staffing projects. Data permitted him to compare the effects of replacing teachers on non-instructional tasks by paraprofessionals as well as on the transitional costs of changing to differentiated staffing. He found that teachers spent about 25 percent of their total time on non-instructional tasks and assumed that if paraprofessionals were hired to perform these non-instructional tasks then approximately 25 percent fewer teachers would be required. Results revealed that for nine out of twelve projects the paraprofessional replacement model would result in a lowering of educational costs. The savings range from a low of $11.00 to a high of $61.00 per student, while the deficits range from $3.00 to $190.00.

In discussing conversion costs, Swanson (1972:347-8) listed two specific areas of costs associated with the initiation of differentiated staffing in a school or school system: staff development and building renovation. He suggested that to help reduce costs, supervisory staff might be used to train teachers or adopt the less costly alternative of training substitutes to fill in for classroom teachers while they are involved in staff development activities. Building costs are usually related to renovations for open area teaching, carpeting to cut down on noise levels, and on the creation of resource centers.

The Commission on Public School Personnel Policies in Ohio (1972) found that most increased costs during the planning stage were associated with in-service training for teachers and administrators, instructional materials, evaluation, project co-ordination and the conversion of buildings. Once the project was implemented, operating costs were similar but not lower than those for a more traditional school.

Operating costs are more difficult to determine since many systems deliberately contained the costs of the differentiated staffing model within the fiscal limits of a traditionally staffed school. Factors which can influence operating costs included the use of paid aides, the availability of special funding, the provision of new curriculum materials, and the mix of teacher salaries for the project. The attitude of the teachers' association is also an important factor. If it is against any reduction in the numbers of certified personnel, costs could increase.

The Walnut Hills Community Elementary School in Cherry Creek, Colorado utilized a staffing structure based on total personnel costs for a traditional school of comparable size. Instead of twenty-seven teachers and six teacher aides, a team of sixteen teachers, eight interns and eight aides was utilized with differential salaries at each level.

Pillot in designing the Sarasota, Florida model rejected the concept of allocation of a certain dollar sum for staffing. He (1972:241) commented:

> When members of an administrative or faculty board (often called a "senate" in other models) are selecting an individual for a particular position on the differentiated staff, they should be free from any consideration except his qualifications. If a dollar price tag is attached, the selectors may be tempted to employ a candidate who is

basically qualified, but not quite as outstanding as one who would qualify for more pay under an existing differentiated staffing salary schedule. Conversely, if both candidates would be charged to the school's budget at exactly the same unit value, the board is free to recommend the better candidate with no temptation to save dollars. It will be apparent to the reader that the approach using a straight dollar-type budget format could easily result in providing a larger, but lower salaried staff—an apparent advantage and bargain. Since assigning to each member of the staff the tasks that are most appropriate to his training, experience, and skill is fundamental to flexible staffing, employing other than a person with the best available level of those three qualities will lower the quality of the instructional program. Differentiated staffing is designed to use staff economically by assigning tasks to those appropriately trained and experienced, and is intended to pay staff members accordingly.

He, therefore, developed a unit index scheme. This staffing sub-model was composed of six parts (Swanson, 1973:344):

(1) a process for allocation of total staff units to each school;

(2) the division of all schools into seven classifications according to size and type;

(3) an assignment of unit values to each position in the vertical hierarchy of the staffing-model;

(4) a procedure for determining the approximate recommended number of each job classification needed at a particular school;

(5) a set of charts from which job specifications may be collated for each staff member; and,

(6) the general criteria by which staff is held accountable for performance.

In any one school, therefore, the actual staffing pattern implemented is at the discretion of the school staff and constrained by the number of units allocated by central office for the recommended staff. Whatever procedures are used for allocating funds, of course, will not affect the conversion or operating costs themselves.

Summary

Available information suggests that the conversion or implementation costs are likely to be substantial; no reduction in operating costs can be anticipated which might help to offset conversion costs. Effective implementation of a differentiated staffing model involves commitment of financial and personnel resources over an extended period of time.

IMPLEMENTATION

In addition to factors such as financial and technical feasibility of implementing an innovation, the extent to which implementation is successful will be determined by personnel and organizational variables as well. Researchers have given attention to both the attitudes of teachers toward differentiated staffing and to the planning process. Some insights into factors crucial to successful implementation may also be derived from reports on projects which have failed. The literature on attitudes and on the implementation process is reviewed in this section of the report.

Attitudes Towards Differentiated Staffing

The attitudes of various school personnel towards differentiated staffing have ranged from the enthusiastically positive to the adamantly negative, independent of whether or not respondents have experience with differentiated staffing. Evans (1970) attempted to measure attitudes towards selected concepts of differentiated staffing among educators with varied degrees of experience in its implementation. He found that there was a reduction in the number of negative responses to differentiated staffing as the degree of commitment increased. The "tried/successful" group was negative in 10 percent more concepts than the "planning" group but was 67 percent less negative than the "naive" group.

A study conducted by McKay (1971) investigated the perceptions of Indiana principals on differentiated staffing as a method of school personnel organization. His conclusions are based on the responses of 240 elementary, junior high, and high school principals. The conclusions included the following:

1. there were no marked differences between the responses of elementary, junior high, and senior high school principals;

2. the majority of principals perceived differentiated staffing to be a better way of organizing personnel;

3. principals did not feel that teachers would favor differentiated staffing; and,

4. differentiated staffing was perceived as providing more meaningful educational opportunities for leaders than traditional staffing patterns.

The principals strongly favored implementation of experimental models of differentiated staffing.

Johnson (1972) studied the attitudes of administrators and teachers towards use of differentiated staffing. His questionnaire was sent to 165 directors of differentiated staffing programs; 102 were returned in usable form. He concluded the following:

1. administrators and teachers felt that the quality of instruction had been upgraded by differentiated staffing;

2. administrators and teachers felt that salaries should match responsibilities; and,

3. teachers should be involved especially in the decision-making processes related to curriculum, time use, and development of inservice programs.

In 1971 English attempted to establish a data base of variables which appeared to be significant in determining the response of teachers to the concept of staff differentiation. Responses to the questionnaire which he developed were obtained from 755 Arizona teachers and 244 out-of-state respondents. The findings of the study were: males were more responsive to staff differentiation than females, secondary teachers were more positive than elementary teachers, elementary females were least positive and became more negative with seniority; and senior teachers were more negative than those lower on the salary schedule. English concluded that staff differentiation does not enjoy universal appeal to the teaching profession and that it appears to be viewed by teachers as a solution to a male problem with teaching as an occupation.

A similar study was conducted by Gray (1972) in the schools of Nebraska; his sample included 792 educators. Gray concluded the following:

1. administrators were more favorable toward the concept than were teachers;

2. men displayed more positive opinions than did women;

3. as level of education increased positive opinion toward differentiated staffing also increased; and,

4. respondents who had been involved in differentiated staffing were more positive toward it.

These findings suggest that the teachers most likely to resist the introduction of differentiated staffing would be female elementary teachers with many years of total teaching experience but with no previous involvement in differentiated staffing.

Rand and English (1972) in discussing the Temple City project mentioned various "hot data"—informal comments—which helped indicate reactions to the introduction of differentiated staffing. These included the feelings of loss of status by staff teachers since there were now a number of "teacher" positions above them on the hierarchy, the predominance of males in top positions especially in elementary schools, and the idea of collegial evaluation. They (1972:114) commented:

> . . . The elementary school with its finger-like wings and boxes once boasted that it could change more quickly and prove to be more adaptable than the secondary school. This is not the case with

staff differentiation. Owing to the high number of women and lack of a history of differentiation of any kind, resistance proves in practice to be much greater at the elementary level. Administrative paternalism runs rampant with the distorted ratio of males to females (the principal is often the only male in the staff of some elementary schools), and the thoughts about greater teacher participation in decision-making are shunned by teachers and principals alike. An attitude inventory administered to the staff revealed that resistance to change was much increased after a teacher had been in the district seven years or longer. The socialization process of living in a school structure founded on certain fixed assumptions had shaped the perceptions of these teachers to the point at which certain kinds of questions outside those assumptions were not considered relevant. Expanding this fixed perceptual field is also a barrier of the first magnitude with the differentiated staff.

The factors noted by Rand and English have implications both for the decision of whether or not to attempt to implement differentiated staffing as well as for the implementation process.

Planning Procedures

A number of research studies have examined the planning procedures used in introducing differentiated staffing. Hoffman (1973) attempted to establish a model for the planning and implementation of differentiated staffing and to obtain the reactions of experienced personnel to the model. Six differentiated staffing projects were selected as a sample and responses were obtained from 239 principals and teachers to a fifty-two item questionnaire. Among the major findings were the following:

1. teachers should be provided with adequate information about differentiated staffing;

2. a model should be designed that would best accomplish the goals of a specific project or an organization;

3. parents should be involved;

4. inservice training is essential; and,

5. students must be prepared for the changes.

These suggestions do not differ from those which would apply to planning and implementing any change in education.

A study of the planning procedures used by school districts that had implemented differentiated staffing was carried out by Mortensen (1974). He attempted to determine the amount, type, quality, and cost of preparation involved in the implementation of differentiated staffing. The population for the study included teachers and administrators who had worked in school districts which had implemented differentiated staffing. Among his major

findings were the following:

1. actual involvement of educators did not match idealized commitment with regard to the amount of preparation, type of preparation, quality of preparation, and cost of preparation;

2. there was a positive relationship between involvement and idealized commitment;

3. administrators were more involved during planning stages than were teachers; and,

4. administrators placed more importance on activities involved during the planning stage than did teachers.

A major implication of the study was that teachers and administrators perceived the importance of their involvement significantly more than was their actual involvement in each of the planning stages. The purpose of a study carried out by Tennant (1974) was to identify and to determine the relative importance of policies, practices, and procedures recommended to facilitate differentiated staffing. He asked respondents to rate items on a five point scale on the degree to which each item was necessary. Of twenty-four items only two, namely, staff involvement in decision-making and individualized instruction were rated as completely necessary by every respondent.

Weller (1972) carried out a study to develop the appropriate administrative courses of action needed when a secondary school moves from a traditional staffing pattern to differentiated staffing. His method was to submit questionnaires to seven secondary school districts engaged in differentiated staffing. Among the administrative courses of action which he recommends are the following: appoint a steering committee, assess readiness to make staffing changes, develop a master plan, perform a task analysis, formalize new role responsibilities, perform a cost analysis, establish job security but not role security, and plan on changing many aspects of the principal's role.

In 1973 Melton studied nineteen specially-funded differentiated staffing projects in thirteen states. He concluded the following on the basis of data on these projects:

1. establishment of teacher decision-making procedures was a major factor in the development of staff differentiation;

2. job descriptions were developed with little or no formal procedures other than subjective judgments;

3. teacher attitudes toward all educational areas improved as a result of processes utilized to develop differentiated staffing;

4. training of staff was necessary for implementation; and,

5. problems associated with the change revolved around inability of people to cope with alterations from the traditional status.

The Manitoba Teachers' Society in their report on differentiated staffing recommended several criteria to be used in developing a differentiated staffing project. Among these were (Ontario Education, 1972:30-31):

> . . . Identification and definition of a need by the staff; provision of adequate resources to lay the ground work; appointment of a project director; establishment of an intensive staff improvement program; participation from the teacher, principal and local teachers' association in planning and implementing all phases of the project; participation on a voluntary basis; determination of salary and working conditions through collective bargaining; and provision in any project for careful and valid evaluation.

Suggestions similar to those identified in specific studies have been presented in a more extensive form by Fiorino (1972:163-4). He advocates the use of the systems approach to planning as an eighteen-step process which can be condensed into the following components:

1. definition of the boundary of the differentiated model (Whether to include both elementary or secondary schools and whether to chose pilot schools);

2. statement of the objectives of the model;

3. identification of all known constraints (Fiscal, legal, competence of personnel, available technology);

4. development of a functional chart (Done by listing all functions which must be performed in order to plan, introduce, evaluate, and maintain the model; functions are then clustered and functional components identified);

5. determination of planning priorities and development of a planning schedule (Usually through the development of a PERT Chart);

6. assembly of functional components; and,

7. testing, evaluation and modification of the model.

In summary, it can be said that there are many similarities in the various approaches for implementing differentiated staffing. The following considerations appear to be important in general:

1. Involve everyone affected by the introduction of differentiated staffing—school personnel, central office personel, school board members, officials of teachers' and trustees' organizations, and community representatives.

2. Set up a definite system for evaluating present procedures before suggesting any alternative.

3. Do not introduce differentiated staffing during collective bargaining negotiations.

4. Link all staffing roles to pupil outcomes to stress the importance of differentiated staffing as a means and not an end.

5. Develop an "openness" in all relations so that hostilities and uncertainties can be aired.

6. Develop rigorous evaluative criteria for assessing the implementation and merits of differentiated staffing in selected pilot schools before legislating system-wide changes.

7. Develop a climate for experimentation with an emphasis on growth rather than on achievements of the system.

8. Provide adequate planning time, especially for in-school staffs.

9. Build on earlier related innovations such as flexible scheduling, team teaching, or the use of aides.

Problems

One of the few studies of the discontinuance of a differentiated staffing project was reported by Wacaster (1973). The question he asked was: What factors contributed to the decision of Columbia High School to discontinue the attempt to implement differentiated staffing? He concluded as a result of participant observation, interviewing, and document analysis that values and norms operating at the school played an important part in the decision to discontinue. The values were related to equality of individuals and governance by the governed while the norms were:

1. that staff should make all decisions in regard to all issues affecting it; and,

2. that all staff members should act as equals toward each other.

The values and norms led to the expectation on the part of staff members that control of the differentiated staffing project lay within the school staff. This expectation was incompatible with the expectation for project control held by the project director and the school district's administration. As a result there was conflict and excessive expenditures of time, energy and emotions. The values and norms at the school were also incompatible with the characteristics of the specific differentiated staffing model: differential distribution of authority, salary differentials, and hierarchy. As a result there was opposition to the model. The incompatability of values and norms also contributed to inadequate job performance by occupants of key positions.

With reference to the failure of differentiated staffing projects, English (1969:214) commented that key elements in determining the amount of negative reaction to the introduction of differentiated staffing were "the size of the school system and its dominant organizational climate, age of the staff, and the degree of freedom permitted to individual schools within the system to change their internal structures." He saw the failure of differentiated staffing in three large systems—Dade County, Miami, Florida (initial try out), Montgomery County, Maryland, where a teachers' strike occurred, and Los Angeles, where an attenuated form of differentiated staffing was introduced with salary levels but no organizational changes—as being due to administrative attempts to reduce or bypass staff involvement and hence minimize resistance in the planning and design phases of the differentiated staffing model.

Harris (1970:32) who was an instructional co-ordinator at King Junior High School, Kansas City, during the implementation of their differentiated staffing program pointed out the importance of teacher role changes, a professional commitment to differentiated staffing, the need for a clear delineation of roles, and the necessity of tailoring any differentiated staffing structure to the needs of the students in a particular school, if the innovation is to be effective. Weaknesses in these areas led to a major re-tooling of the differentiated staffing project in its second year at King. Many of Harris' suggestions, however, are linked to financial funding of the planning stage of the project, and to problems generally related to the change process.

After intensive case studies in four schools where differentiated staffing was in the process of being implemented, Charters and Pellegrin (1972:12) were able to delineate chronic problems related to the process of change:

1. The fundamental but generally unacknowledged strain that exists between the ideology of teacher governance and the strategy of directed change.

2. The gross unclarity in conceptualization and definition of what the schools are attempting to implement through change projects.

3. The heavy reliance on structural change (writing job descriptions, changing titles, altering organizational units) in the belief that appropriate behavior changes will automatically follow.

4. The fallacious assumption that a statement of general, abstract program values and objectives will easily be translated into new and appropriate behavior patterns at work.

5. The unrealistic time perspective of those responsible for educational innovation, according to which basic and far-reaching changes in instructional roles and staff relationships are seen as accomplishable within a year or two.

6. The ambiguities and stresses that arise in the disjunction between the school district's established administrative structure and the temporary system for project management.

7. The failure to recognize that teachers have scant training and experience in forming and implementing processes and procedures for collaborative decision making.

8. The conflict in goals, values, and interests, seen especially in the relationships between the central office administrators, the project managers, and the school staffs (produced mainly by the requirements of their inherently different work contexts).

9. The absence of managerial and monitoring procedures to assure implementation and to alter plans in the face of contingencies that inevitably occur.

10. The failure to recognize the severity of role overload among members of the instructional staff when innovation is attempted.

11. The tyranny of the time schedule in constraining change.

12. The apparent assumption that schools need little additional resources (financial and personnel) to cope with the massive organization disruptions during the period of transition from one educational program form to a new one.

Failure to give attention to these problems will increase implementation difficulties and reduce the probability of successful implementation of differentiated staffing.

THE CANADIAN EXPERIENCE

Implementation of organizational innovations such as differentiated staffing by Canadian school systems approximately parallels developments in the United States. However, there are noteworthy differences which merit separate elaboration. These relate to the pace of adoption and form of differentiated staffing, the employment of paraprofessional personnel, and the utilization of volunteer aides.

Differentiated Staffing Practices

The implementation of differentiated staffing in Canada has not proceeded at a similar pace nor with the same level of financial support as it has received in the United States. Hunt (1972:51) suggested several factors unique to education in Western Canada which would help to explain the present limited extent of differentiated staffing:

1. The compulsory nature and strength of the teachers' associations.

2. The level of teacher professional training.

3. The number of students involved in practice-teaching and intern programs.

4. The fact that we do not have a tradition of paying teachers for curriculum development.

5. The lack of large sources of funding for innovative projects.

6. The degree to which all schools are becoming increasingly innovative.

On the basis of his observations Hunt (1972:58) concluded that, possibly due to these factors, "there has been only a limited development of this concept [differentiated staffing] in our schools."

The various differentiated staffing practices in Western Canada include (1) the Bishop Carroll High School Project in Calgary which utilized the Trump "Model School" plan for staff utilization, (2) the British Columbia differentiated staffing projects in the Peace River South District and the Kamloops District which utilized teacher teams, "student families," interns and volunteers, and also the Langley School District project, and (3) the Manitoba differentiated staffing project which involved nine schools in Winnipeg.

The Bishop Carroll High School project was begun in 1971 as one of the schools in the Model Schools Project sponsored by the National Association of Secondary School Principals. Program modifications include the reorganization of the curriculum in the school into nine areas of knowledge: English-Language Arts; Fine Arts; Health, Fitness and Recreation; Mathematics; Modern Languages; Practical Arts; Religious Studies; Sciences; and, Social Studies. The teaching-learning strategies used include large and small group instruction, seminars, and independent study.

The differentiated staffing structure adopted is a reflection of the teaching and learning strategies utilized in the school. The certificated staff include two administrators, an activities director, a personnel director, two counsellors, and thirty-six regular instructors who also act as student-advisors. Fifty-three non-certificated personnel are also employed at the school. Of these twenty-eight are instructional assistants who have at least two years of university credit in the subject field in which they work; they help individual students, keep order, and assist teachers in preparing materials and evaluating progress. Fifteen are general aides who provide resource materials for students, maintain student files and records, and label and shelve library materials, while ten are clerical aides who type, file, answer the telephone, and look after the mail.

The Peace River South District project was initiated in 1970 in three elementary schools. Students were divided into groups of seventy-five at the elementary level and of 150 at the intermediate level; three to five staff members with different roles and responsibilities were assigned to work with each group. The group was led by a team leader who was responsible for the overall instructional program while the other members were either assistants or aides. A number of student interns and volunteer aides were also assigned to each group.

The Kamloops District project was developed in an attempt to determine the potential usefulness (1) of establishing alternative roles to that of "teacher" such as coordinating teacher, associate teacher and teacher aide, and (2) of the extensive use of cross-age student tutoring in elementary schools.

Two schools were included in the initial plan which was started in 1971, and a third school was added in 1972 after the transfer of one of the participating principals. The staffing pattern chosen was horizontal differentiation with differences in salary determined by the assumption of duties beyond those of a regular teacher. Each school was divided into units, termed "families," consisting of 130 pupils, a coordinating teacher, three staff teachers, a student teacher, parent volunteers, and student tutors. These tutors were either from the upper grades in the school or from a nearby junior secondary school. The principal, coordinating teachers, librarian, and remedial consulting teacher formed a School Staff Advisory Committee in each school.

The three schools involved in the project were evaluated in 1973 as to their ability to provide a structure for diffuse decision-making, to provide opportunities for teachers in roles other than administration and to establish training programs for personnel. In two schools, discussions at the Staff Advisory Committee meetings indicated that diffuse decision-making was occurring but in the third school, a change of principal had greatly reduced decision-making by teachers.

Similarly, within two schools teachers in coordinating and consulting roles had developed widely diverse but acceptable styles of operation, ranging from homerooms and departments to open areas, and with emphasis ranging from curriculum development to the coordination and training of student tutors. In the third school, the only pattern was the traditional one of regular classroom teacher and ancillary specialized roles, e.g. librarian.

With regard to training programs for personnel, the evaluators (Elliott et al., 1976:78) stressed the need for periodic reinforcement after the initial training sessions and the lack of allocation of funding, time, and consultants to this area in the initial proposal. In contrast, the student-tutoring program was highly praised by all involved. The evaluators (Elliott et al., 1976:49) commented that "Teachers feel that this has been one of the most significant developments to date both for the student being tutored and for the student tutor."

The Langley School District Differentiated Staffing project was a one-year project (1972-73) delimited to one teaching group consisting of four teachers, a clinical aide, and a teacher intern in one elementary school. The personnel problems which resulted in many staff transfers were compounded by the fact that construction of the school chosen was not completed by September 1972.

The Manitoba project began in 1971 when the Minister of Education authorized the establishment of a $200,000 fund to develop alternative staffing models; implementation of proposed models began in September, 1972. The definition of differentiated staffing accepted by the project members (1975:2) was as follows:

> Differentiated staffing is a staffing arrangement that makes optimum use of the individual talents, professional expertise, interests and skills of educational personnel in such a way as to best meet the needs of the students.

While the nine schools planned differentiation in a variety of ways, common characteristics in all projects were a team approach to teaching, emphasis on individualization of instruction, school philosophies tending towards Open Education, utilization of paid paraprofessionals and volunteers, and a field-based teacher training program.

One of the projects terminated in 1974. Funding for all projects, which was restricted to the training of personnel and purchase of materials for a maximum of three years, terminated in 1975. At present, all school projects are still in operation although lack of funds has limited professional development which project members see as essential to the successful continuation of the project.

In comparison with the Western Canadian emphasis on elementary schools, differentiated staffing projects in Ontario and Quebec have tended to be at the high school level. In the two Ontario differentiated staffing projects—Lord Elgin Secondary School, Halton County, and Overlea Secondary School, Leaside—attempts were made to reduce the number of department heads by reorganizing curriculum areas and to use the available funds for employing instructional assistants and teacher aides. The Quebec school, Beaconsfield High School in Pointe Claire, has continued to operate under the traditional staffing structure but has, since 1967, used the services of approximately two hundred volunteer aides whose work is managed by a volunteer assistants coordinator.

Employment of Paraprofessionals

In contrast to the relatively recent efforts at implementing differentiated staffing, the use of paraprofessionals in schools in Western Canada began in the early 1960's. In a review of literature on the utilization of paraprofessionals, Mori (1971:24) commented:

> A judicious and cautious approach to the use of paraprofessionals seems to be the defining mark of Canadian school systems. There does not seem to be any great readiness to accept a differentiated staffing concept, although the use of paraprofessionals outside of professional tasks is generally acceptable.

Mori (1971) also suggested that any substantial increase in the use of paraprofessionals would probably be linked to the injection of federal or provincial funding because there is little doubt that grants such as the Local Initiatives Program have made a major contribution to the employment of auxiliary school personnel.

Enns (1974) further emphasized some of the economic factors underlying utilization of paraprofessionals. He (1974:12) stated:

> Whereas teacher aides—students, clerks, markers, volunteers—have been used in our schools for a long time, the notion that auxiliary personnel be integrated into the instructional team is less than ten years old in Canada. The main justification for the trend "to assign personnel without teacher certification some responsibilities in the instruction of students and in the operation of school services" (Perras, 1973) is the quest for more effective utilization of the teachers' time and their professional skills in view of the current higher cost of their salaries. It is an innovation intended to raise the quality of education without increasing the cost.

The numbers of paraprofessional personnel employed and the duties assigned to them have been the objects of studies at national, provincial, and local levels.

The results of the first national survey of the employment of aides conducted by the Canadian Education Association in 1967 are reported in Table 2.3. Of sixty Alberta school systems, only sixteen reported the use of teacher aides; fourteen school systems which replied to a follow-up enquiry reported that a total of forty-six aides, thirteen in elementary schools and thirty-three in secondary schools, were employed. In contrast twenty-five of forty-eight districts in British Columbia employed aides; twenty districts reporting a total of 136 aides, nineteen in elementary and 117 in secondary schools. The CEA report (1967:28) concluded that teacher aides were employed exclusively for non-instructional duties, especially:

> . . . housekeeping chores in science labs, marking of essays, preparation of visual materials, operation and care of audio-visual equipment, and supervision of students during period when they are not in regular class.

In the 1970 Report on a Survey of Teachers' Aides (ATA, 1970:2), the percentage of schools reporting employment of non-certificated personnel in addition to clerks and secretaries increased from 24 to 31 percent between 1968 and 1970. The most common duties of aides listed in 1970 in descending order of frequency of mention were as follows:

Table 2.3

Results of the 1967 Canadian Education Association Teacher Aide Survey

Provinces	No. of school systems surveyed	No. of systems reporting use of teacher aides (useable replies)	No. of teacher aides		
			Elem.	Sec.	Total
British Columbia	51	23	19	117	136
Alberta	70	14	13	33	46
Saskatchewan	75	4	1	9	10
Manitoba	46	4	4	62	66
Ontario	146	23	84	375	459
Quebec	111	26	41	217	258
New Brunswick	21	1	1	1	2
Nova Scotia	29	2	2	1	3
Prince Edward Island	9	--	--	--	--
Newfoundland	18	--	--	--	--
Total	576	94	165	815	980

1. Supervising hallways, lunchrooms, playgrounds;
2. Clerical and secretarial work for teachers;
3. Working with group of pupils in classroom;
4. Assisting with audio-visual equipment;
5. Assisting teacher-librarian;
6. Assisting the teacher in the classroom;
7. Assisting teacher with instruction; and,
8. Supervising study hall.

Only items number 3 and 7 are instruction-related tasks.

The tasks listed above can be compared with the duties for school aides (1975:6) identified in the 1974 CEA study which were as follows:

> . . . general assistance in libraries, resource centres, classrooms, and science labs; preparing AV materials and operating the equipment when necessary; supervising a classroom during the temporary absence of a teacher; supervising playgrounds, study halls, and lunchroom areas; assisting with the physical education programs; clerical work, such as typing, filing, telephone answering, preparing classroom materials, and operating duplicating machines; issuing textbooks; helping on field trips; playing musical accompaniment for games and school activities; sewing costumes for school plays and concerts; and assisting in the organization and operation of school clubs.

It can be concluded from these lists of tasks, that teacher aide deployment in classrooms in general has not changed significantly since 1967.

The lack of instruction-related tasks may be explained with reference to the teacher-teacher aide ratio in any one school. In a report on instructional practices in Alberta schools in 1968-69, Ratsoy (1970:48) indicated that while over 50 percent of the teaching force had access to clerical assistance, only 17 percent had access to teacher aides. Further (1970:54), 75 percent of teachers indicating access to teacher aides could use the paraprofessionals' service for only two hours per week. Similarly, Haughey (1972) asked teachers to indicate whether they had teacher aide and clerical assistance available to them, and, if so, to rate the numbers of personnel available on a scale of "Too Many" to "Unavailable." As is reported in Table 2.4, 52 percent of teachers indicated that in-school teacher aides were "Unavailable" while the figure for clerical services was 7 percent. Figures for paid instructional aides in other Western Canadian provinces are reported (CEA, 1975:9) in Table 2.5.

Table 2.4

Assessments by Teachers in Sample of Adequacy of Numbers of In-School Personnel To Provide (1) Teacher Aide and (2) Clerical Services

Jurisdiction		Percentages of teachers making each assessment					
		Too many	Sufficient	Too few	Unavailable	Undecided	Don't know
		%	%	%	%	%	%
Counties	TEACHER AIDE	0.4	8.0	16.0	67.4	2.8	5.6
Divisions		0.0	17.9	17.0	55.8	3.1	6.3
Public Districts		0.0	9.9	27.8	48.9	4.0	9.3
Separate Districts		0.4	15.3	30.0	44.2	2.0	8.1
Overall		0.2	12.6	24.8	51.7	3.0	7.7
Counties	CLERICAL	0.0	43.4	42.4	8.0	3.5	2.8
Divisions		0.0	37.5	37.5	18.3	3.1	3.6
Public Districts		0.2	49.9	39.8	4.0	3.2	3.0
Separate Districts		0.2	48.1	41.4	5.5	1.3	3.5
Overall		0.1	46.3	40.5	7.3	2.6	3.2

Table 2.5

Numbers of Paid Paraprofessionals Employed by Province and Year

	1968	1969	1970	1971	1972	1973	1974
Saskatchewan	--	--	66	150	218	391	550
Alberta	200	--	565	--	--	1,985	--
British Columbia	84	--	169	--	179	--	--

In conclusion, while there has been a steady growth in the number of teacher aides employed in Alberta schools, the specifics of present practices are uncertain, and the duties of aides (possibly due to a lack of personnel), seem to have remained almost entirely in the area of non-instructional tasks.

One of the first studies in Alberta on teacher aide utilization was commissioned by the Alberta Teachers' Association in 1960 (Kennedy, 1960) and was published as the Association's first research monograph. Since that time many studies have examined the actual changes in teacher role and the duties assigned to aides. Generalizability of the findings, however, has been limited by the number of aides examined and the length of time for which the aides were employed.

The Teacher Aides Tryout project, which was carried out in the County of Parkland in 1969, involved the placement of four aides in four schools with each aide assigned to four teachers. Teachers were generally satisfied with the aides' activities; the aides reported that they preferred working directly with students in the classroom, that orientation to the school and work was essential, and that they encountered difficulties with some teachers who had reservations about using aides.

The Eckville Teachers' Aide Project under the auspices of the Human Resources Research Council and the County of Lacombe took place during the 1969-70 school year. Prior to the hiring of non-professional staff, the Eckville Junior-Senior High School Planning Committee administered a workload analysis instrument. Data revealed that for the thirteen teachers, 76 percent of their time was devoted to actual instruction or lesson preparation, 18 percent was spent in clerical activities, and 7 percent in supervision. Most of the teachers were agreed that clerical and supervisory activities might be performed by teachers' aides. Accordingly in February two aides, one full-time and one part-time, were hired for the remainder of the school year. Teachers were generally satisfied with the assistance provided by the aides although they, and the aides themselves, were less satisfied with the policing of student behavior. The teachers also mentioned a need for clarification of roles,

for guidance in the effective utilization of aides, and for more training and supervision of aides.

In 1972 a similar project was undertaken by the Calgary Separate School District (Black and Bunyan, 1973). Each teacher in three schools was assigned an aide from February to June. These fifty aides were mainly grade 12 students. Findings revealed that the teachers felt aides were desirable, and the aides enjoyed the experience. The presence of the aide was not found to influence significantly the teaching format of the teacher nor the academic achievement of pupils in those classes with aides when compared with teachers and pupils in schools without teachers' aides.

In a survey of seventy-five teacher aides in Edmonton (Edmonton Public School Board, 1974), the aides listed their most frequently performed duties as working with students, typing, operating office machines, and assisting teachers in the classroom. They felt their four easiest duties to be clerical work (filing, sorting, shelving), operating office machines, typing, and library work, while their four most satisfying duties were working with students, assisting the teacher in the classroom, typing, and receptionist duties. Over 26 percent of the aides felt that their formal on-the-job training had been "Inadequate" or "Very Inadequate."

A more recent survey of a group of 139 Edmonton teachers' aides (Balderson and Nixon, 1976:1) found that their most frequently performed tasks were duplicating materials, supervising a class for a few minutes, helping individual students, and taking charge of a small group of students. Aides were, in general, very unsure of their own role and felt that individual teachers and principals had widely varying perceptions of the teachers' aide role. However, no extensive survey of teachers' aides, their tasks, their impact on instruction, and their perceptions of their role has been carried out in Alberta to date.

Volunteer Aides

Even less has been reported about the numbers of volunteers working in Alberta schools. In a survey of teacher aides (ATA, 1970), 12 percent of the 907 schools surveyed reported utilizing volunteer aides to assist teachers; these were mainly elementary schools. While no figures were available for Alberta, Statistics Canada (1974) reported approximately two thousand volunteer aides in Manitoba, one thousand in Saskatchewan and six thousand in British Columbia for the 1973-74 school year.

One of the most extensive studies on volunteer aides was completed in 1972 by Hedges who surveyed 100 Ontario elementary schools. He found that forty-eight schools used volunteers, of which twenty-three used their services in the instructional program. His results showed that teachers enjoyed having aides, spent more time in higher-level tasks, e.g., planning, and gave individual pupils more attention.

In an Edmonton survey of volunteer aides (Edmonton Public School Board, 1972) the typical volunteer aide was described as a female, between

thirty-two and forty years of age, with some post-secondary education, who came in 1/2 day per week to assist in the classroom or at clerical duties in the local elementary school which her children attended. Duties listed by volunteer aides as most frequently assigned included the following:

1. accompanying pupils on field trips;
2. library work;
3. drill games with pupils;
4. making costumes, props, programs for school plays;
5. correcting short-answer and multiple choice tests;
6. reading stories to students; and,
7. assisting the teacher—aiding in demonstrations, preparing classroom materials, housekeeping, bulletin boards, handing out and collecting work.

The last item was mentioned by both aides and teachers as an area having top priority for average involvement by volunteer aides.

A survey of volunteer aides in Winnipeg schools in 1972 (Manitoba Department of Education, 1972) reported 141 schools using 2,077 volunteers. Eighty-four percent of the teachers felt that the utilization of aides allowed them to spend more time on professional tasks. They found aides most helpful when they worked with an individual child, prepared classroom materials, worked with small groups of children, did clean-up and housekeeping tasks, and monitored a class.

A study carried out in Calgary (Mirtle, 1974) attempted to examine the perceptions of principals with regard to volunteer aides. In particular, the study sought to determine elementary principals' perceptions of the reasons for the increased trend towards volunteer aides, the benefits and risks at the school level, and the resource investments necessary to plan, initiate, and maintain a volunteer aide program. Of the forty principals interviewed, thirty-three had volunteer aide programs in their schools. The school system had a full-time Volunteer Coordinator who indicated that in 1972, eight-four schools used approximately twenty-one thousand volunteer aides which is equivalent to three thousand two hundred man-hours per week or approximately one hundred full-time staff.

The principals thought that the trend towards aides was a result of the increased pressures on teachers for program individualization and saw the benefits to teachers as the most important factor. Principals who had had experience with many volunteer aides mentioned few risks while principals with few or no aides felt the risks to be many. Of major importance to a successful program was the time and effort needed to plan for and train personnel before the start of the program. In comparison, little time was required to maintain the program.

Summary

While the extent of differentiated staffing in Canada is minimal and limited to a few experimental situations, the use of paraprofessionals, both paid and volunteer, would seem to be extensive. Much research still remains to be done to examine the effect of such personnel on the quality of instruction in Canadian schools, the tasks best assigned to them, and their impact on the professionalization of teachers.

CONCLUSIONS

Although numerous specific conclusions may be drawn from the review of literature on the subject, only some of the more general conclusions about differentiated staffing are identified below. The conclusions relate to the basic concept, to the various models which have been developed, to the implementation of differentiated staffing, and to its possible consequences.

1. A fundamental premise in proposals for differentiated staffing is that teachers vary in the skills they possess and that teaching has both instructional and non-instructional components.

2. Differentiated staffing may be conceptualized in terms of differentiation along the four dimensions of responsibility, function, skill, and salary.

3. The various differentiated staffing models emphasize different characteristics and combine them in different ways; only team teaching and the use of paraprofessionals are common to all models.

4. The major benefits of this form of organization lie in increased satisfaction levels for administrators and teachers, although a variety of individual characteristics mediate the relationship between the degree of differentiation and the level of satisfaction.

5. The major costs of differentiated staffing are related to planning, development, and implementation; operating costs are generally similar to those in schools with traditional staffing patterns.

6. Assured long-term funding and the location at the school level of discretionary power to make budget decisions are important to the success of the practice.

7. Careful definition of needs, adequate resources, staff preparation, and a high degree of commitment and involvement are important to the success of differentiated staffing.

8. Administrators tend to be more enthusiastic than teachers, male teachers tend to be more enthusiastic than female teachers, and secondary teachers tend to be more supportive than elementary teachers in relation to differentiated staffing.

9. The adoption of differentiated staffing by school systems in Canada has been limited and has proceeded cautiously; however, there have been numerous projects which involve the addition of paraprofessional personnel and volunteer aides to school staffs.

There is need for further research to determine the nature, extent, and outcome of differentiated staffing together with the reasons and expectations associated with the adoption of various models. In particular, the results of research on the consequences of differentiated staffing for students and student achievement are inconclusive. School systems which decide to adopt differentiated staffing should be prepared to go beyond mere structural change in order to increase the probability of achieving desired outcomes. Among the factors which require attention are the selection and preparation of personnel, the assurance of necessary long-term funding, and appropriate budgeting practices.

CHAPTER 3

SUPERINTENDENTS' REPORTS ON ALBERTA STAFFING PRACTICES

Information on the nature and extent of differentiated staffing practices in Alberta schools was gathered from three main sources, teachers, principals and superintendents of schools. This chapter reports on the survey of superintendents. A questionnaire was developed to ascertain the extent to which differentiated staffing existed in the school jurisdictions of the province. This questionnaire incorporated the major staffing categories employed in differentiated staffing projects in Canada and the United States. As a result of a pilot study, certain modifications were made and definitions included.

The survey questionnaire consisted of three parts. In the first part superintendents were requested to name any schools in their systems which they perceived as having staffing practices differing in a marked degree from traditional staffing practices in the use of professional and/or paraprofessional personnel. The second part sought information concerning categories of school-based professional, paraprofessional, and volunteer personnel. The third part dealt with the nature and duration of any differentiated staffing practices that had been implemented and later discontinued. In addition, space was provided for comments.

A mailing list from the Department of Education provided the names and addresses of the 92 Alberta school superintendents, all of whom were asked to complete the questionnaire. Eighty-six superintendents (93.5 percent) with responsibilities for 116 of the province's 141 jurisdictions complied with the request.

STAFFING PRACTICES FOUND IN THE NOMINATED SCHOOLS

From information given in the first part of the questionnaire, a list of schools named by the superintendents together with the nature of the implemented non-traditional staffing practice or practices was compiled. This list was the sampling framework for the in-depth case studies of differentiated staffing practices in Alberta. It was also used in the schools survey reported in the next chapter.

The responses were classified according to type of jurisdiction in the province, that is, whether School Division, County, Public School District, Roman Catholic Separate School District, or Other. For eleven of the 26 School Divisions for which data were gathered, superintendents named schools with staffing practices which they thought differed to a marked degree in the use of professional and/or paraprofessional personnel from traditional staffing practices. A total of 25 such schools were identified in these Divisions. Twenty-three schools were identified in nine of the 28 responding Counties. Fourteen schools were identified in eight Public School Districts while in 15 Public School Districts, including some of the largest in the province, no schools were named. Out of a total of 34 responding Roman Catholic Separate School Districts, 13 jurisdictions identified a total of 24 schools with markedly different staffing practices. Of the five school districts that have been categorized as "Other," two jurisdictions responded by identifying schools; one jurisdiction in this category named one school and the other jurisdiction listed five schools. In total, for all types of jurisdictions, 91 schools were identified as having staffing practices markedly different from those traditionally used.

It is noteworthy that for three large urban districts no schools were listed, while for some of the smaller jurisdictions most or all of the schools were identified. A partial explanation of this phenomenon is the different interpretations given to the concept "differentiated staffing" and the variety of perceptions concerning what constitutes a non-traditional staffing practice.

By far the most frequently mentioned practice, associated with two-thirds of the nominated schools was the use of aides. These ranged from school aides and instructional aides to parent volunteers and the use of students. Also mentioned was the Model Schools Concept which, along with the utilization of aides, is associated with current efforts to differentiate staff functions. None of the other practices mentioned by the superintendents was identified with more than a handful of schools and most were associated with only one nominated school although some of the reported staffing practices are found in many schools in, for example, large jurisdictions of the province. Perhaps, because of their use within the jurisdiction for a relatively long period of time, these practices were no longer regarded by superintendents as "non-traditional." Examples of such practices are other aspects of differentiated staffing including large group instruction, team teaching and the use in schools of business managers. The more familiar practices mentioned by a few superintendents

which also fall in this category are departmentalization, the use of grade coordinators and grade-to-grade grouping in reading.

Several of the practices mentioned appeared to reflect increased community involvement in schools or were reactions to particular community needs. Among these were: School and Community Liaison Officer; Career Counsellor; Early Childhood Coordinator; use of noncertificated personnel in bilingual schools; Native Paraprofessionals; Itinerant Teaching; School Based Learning Assistance Centre; specially staffed swimming programs; and kindergarten to grade four integration. In addition, several schools were named for which the nature of the staff differentiation was not given.

What seems to be the noteworthy outcome of this review is the great variety of practices which represent varying degrees and varying types of staff differentiation within Alberta schools.

CATEGORIES OF SCHOOL-BASED PERSONNEL

Professional Staff

Table 3.1 presents the number and percentages of schools, by types of jurisdictions, which employed different categories of school-based professional personnel. Some categories listed in the questionnaire were not chosen at all by the superintendents while other categories were apparently used in a very small percentage of all schools. No schools within the jurisdictions for which returns were received reported having interns on a full-year basis or master teachers. Three classifications of school-based professional personnel are shown in the table. The extent of use of the individual staffing categories within each of these classifications is discussed under the first three headings below. A caution is expressed that some of the percentage figures shown may be artificially low because one large urban jurisdiction was not able to supply information with respect to the schools which employed several of these staffing categories.

Also included in this section are comparisons of school-based professional staffing categories among the various types of jurisdictions in the province, information on the year of initiation of these staffing categories in the province and several additional staffing categories provided by superintendents.

Instructional personnel. As is evident from the percentages given in the last column of the table, the two most widely used categories of school-based instructional personnel were "resource teachers" employed in almost two-fifths of schools, and "remedial teachers" employed in about one-seventh of schools. Approximately one school in ten had "teacher interns" during the May-June period. The next most commonly found category appeared to be "department head/program assistants." The remaining three categories, namely, "team teaching leaders," "grade coordinators," and "reading diagnosticians/clinicians" were reported for fewer than two percent of schools.

Table 3.1

Professional Staffing Categories in Alberta Schools Shown as a Percentage of Schools in Each Type of Jurisdiction

Staffing Category	TYPES OF SCHOOLS[1]											
	County Schools (n=314)		Division Schools (n=276)		Public District Schools (n=451)		Roman Catholic Schools (n=192)		Other Jurisdiction Schools (n=13)		All Schools (n=1246)	
	N	%	N	%	N	%	N	%	N	%	N	%
Instructional												
Master Teachers	-	-	-	-	-	-	-	-	-	-	-	-
Team Teaching Leaders	-	-	1	0.4	2[2]	0.4	-	-	-	-	3	0.2
Department Heads/ Program Assistants	13	4.1	3	1.1	29[2]	6.4	62	32.3	1	7.7	108	8.7
Grade Coordinators	3	1.0	2	0.7	6	1.3	-	-	7	53.8	18	1.4
Remedial Teachers	40	12.7	28	10.1	25[2]	5.5	70	36.5	6	46.2	169	13.6
Resource Teachers	111	35.4	115	41.7	153	33.9	100	52.1	7	53.8	486	39.0
Teacher Interns (May-June)	26	8.3	32	11.6	15	3.3	43	22.4	2	15.4	118	9.5
Teacher Interns (Full Year)	-	-	-	-	-	-	-	-	-	-	-	-
Reading Diagnosticians/ Clinicians	1	0.3	4	1.4	16	3.5	4	2.1	-	-	25	2.0
Pupil Personnel												
School Counsellors	117	37.3	26	9.4	151[2]	33.5	64	33.3	9	69.2	367	29.5
School-based Psychologists	-	-	-	-	13	2.9	-	-	-	-	13	1.0
Social Workers	8	2.5	-	-	17	3.8	1	0.5	-	-	26	2.1
Speech Therapists	23	7.3	15	5.4	15[2]	3.3	9	4.7	-	-	62	5.0
Others												
Community School Directors	1	0.3	3	1.1	-[2]	-	4	2.1	1	7.7	9	0.7
AV Directors	2	0.6	5	1.8	1[2]	0.2	1	0.5	-	-	9	0.7
Subject Area Consultants/ Coordinators who serve more than one school	35	11.1	69	25.0	41[2]	9.1	11	5.7	2	15.4	158	12.7

[1]The number of schools for each responding jurisdiction was computed from the Department of Education's LIST OF OPERATING SCHOOLS IN ALBERTA 1974-75.

[2]One large urban public school district did not specify the number of schools having this staffing practice. No estimate was made.

An explanation was offered by the deputy superintendent of a large urban school district as to the reason for the declining use of the "Team Leader" category in that jurisdiction:

> The term "Team Leader" was introduced into the Collective Agreement approximately four years ago. A school was permitted to request two or three team leaders in lieu of an assistant principal. In effect, only those schools entitled to an assistant principal on the basis of their size were entitled to team leaders. The number of schools using team leaders varied from five to eight over the years. Unfortunately, there has developed a controversy between the Board and the Alberta Teachers' Association over the administrative allowance, with the result that the number permitted in lieu of an assistant principal has been limited to two. Because of this, several schools have reverted to the assistant principal.

Pupil personnel staffing categories. Of the four staffing categories shown, "school counsellors" were the most frequently reported, being associated with approximately thirty percent of Alberta schools. "School-based speech therapists" were reported for about five percent of schools, and "school-based social workers" and "school-based psychologists" for two and one percent respectively.

Other professional staffing categories. Of the three areas listed, "subject area consultants" were employed in thirteen percent of schools, while less than one percent employed "community school directors" and "audiovisual directors."

Overall an examination of the professional staffing categories shows an emphasis in Alberta schools on those professional positions, such as "counsellor," "resource teacher," and "remedial teacher," whose specific concern is individual pupil needs. Of the administrative/supervisory positions shown, emphasis seems to be on those which suggest collegial or peer assistance to teachers such as is implied in the "subject area consultant/coordinator" title rather than on the staffing categories which suggest a more formal hierarchy within the teacher ranks such as the "master teacher," "team teaching leader," "department head," and "grade coordinator" positions listed in the table.

Comparisons between types of jurisdictions. Superintendents also reported the numbers of personnel in their jurisdiction which fell into each of the staffing categories shown in Table 3.1. These figures, combined with the percentages given in columns 2, 4, 6 and 8 of Table 3.1, reveal that some staffing categories are more common in some types of provincial school jurisdictions than in others. Since the information gathered relates to school-based personnel only, no attempt was made to generalize from these figures to the total of specialized services available to the schools in the various types of jurisdictions. Some superintendents indicated that although no school-based personnel of a particular category listed in the questionnaire were available within their jurisdictions, the services of such professionals were made available to schools either through central office personnel deployed on a system-wide basis or through the Regional Offices of the Department of Education.

Some school-based staffing categories are more common in Public and Roman Catholic District schools than in County and School Division schools. Among these are "department heads/program assistants" positions and "reading diagnosticians/clinicians." On the other hand, the probability of finding "subject area consultants/coordinators" appears to be somewhat higher in Counties and Divisions than in Public or Roman Catholic Districts.

When the two types of large rural units of school administration, the Counties and School Divisions, are compared, differences are not great with two exceptions; Counties seem to have a higher proportion of schools with counsellors on staff (37 vs. 9 percent), whereas a higher proportion of Division than County schools employed the services of subject area consultant or grade coordinators who serve more than one school (25 vs. 11 percent).

A comparison of the two types of jurisdictions which are mainly urban, the Public School Districts and the Roman Catholic Districts, revealed that on average the latter seemed to make more use of "department heads/program assistants," "remedial teachers," "resources teachers," and "teacher interns," whereas the former seemed to make more use of "school-based psychologists," "social workers," and "subject area consultants/coordinators who serve more than one school."

Year of initiation of professional staffing categories. Superintendents were requested to provide the year in which each of the professional differentiated staffing categories found in their jurisdiction was initiated. Information on the year in which long established staffing categories were first introduced was not always available. As one superintendent pointed out, the establishment of the year in which certain categories were initiated would require many hours of research and there were no personnel available to undertake such an assignment. A number of superintendents indicated that in some instances they were giving the approximate year; others, perhaps for the above-mentioned reason, did not provide this information.

Based on the superintendents' reports, most staffing categories shown in Table 3.1 were initiated in different jurisdictions of the province in years spanning the 1960's and 1970's. Exceptions to this were the categories of "teacher intern," "school counsellor," "team teaching leaders," "community school directors," "AV directors," "school-based social workers and speech therapists." The longest-established school-based staffing category reported was that of "teacher interns (May-June)" in at least one Roman Catholic School District. This category dates back to 1934. The "school counsellor" category was initiated in some jurisdictions as early as 1950. The more recent school-based staffing categories introduced into the province appear to be "team teaching leaders," "community school directors," "AV directors," and "school-based social workers," all initiated during the 1970's; and school-based "speech therapists," first introduced in 1969. The two most recently established professional differentiated staffing categories in the province seem to be the "AV directors" and "community school directors"; both categories appear to have been initiated in School Divisions in 1971.

Additional professional staffing categories. In the open-ended part of the section of the questionnaire on professional school-based staff, superintendents added a variety of other positions not listed in the questionnaire. Information was received for 13 jurisdictions. The most frequently mentioned position was that of "librarian" with a number of jurisdictions reporting the use of "itinerant teachers of the hearing impaired," and "itinerant teachers of the visually impaired." Also mentioned were "reading specialists," "Native language teachers," "teachers of English as a second language," "religion consultants," "resource centre teachers," "program development officer," "program coordinator," and "Educational Opportunities Fund teachers."

Again, one is impressed with the great variety of school-based professional staffing categories some of which seem to be more useful or necessary in some types of jurisdictions or some parts of the province and others seeming to be more relevant in other jurisdictions or other parts of the province depending on local needs and preferences.

Paraprofessional and Support Staff

The numbers of schools, by type of jurisdiction, employing different categories of paid paraprofessionals and support staff are shown in Table 3.2. Also indicated are the percentages of schools utilizing each of these categories of personnel. All categories of paraprofessional and support staff listed in the original questionnaire were found in at least some of the jurisdictions of the province. As indicated by the percentages in the last column of the table, of the nine categories shown the most widely used category is that of "typists/secretaries" found in over three-quarters of all schools. "Library aides or assistants" were reported for almost half of Alberta schools and "teachers' aides/instructional aides" for about two-fifths. Almost a third of the schools utilized the services of "school aides/general aides" and a fifth had "clerical aides." In relation to this last-mentioned category, some respondents admitted an inability to distinguish meaningfully between this and the "typists/secretaries" category and reported placing all clerical assistance in the "typists/secretaries" category.

About one school in eleven had "business managers." Among the least frequently used of the paraprofessional and support staff categories are "laboratory aides/laboratory technicians" and "resource centre aides/AV aides," each being found in about six percent of schools, and "supervision aides" found in under four percent.

Utilization of paraprofessionals and support staff in different types of jurisdictions. The percentages given in columns 2, 4, 6, 8 and 10 of Table 3.2 reveal that some categories of paraprofessional and support staff are more frequently found in school jurisdictions of one type than another.

Some school-based categories of paraprofessional and support staff were utilized in a greater proportion of Public and Roman Catholic Separate School Districts, which are mainly urban, than in the Counties and School

Table 3.2

Paraprofessional Staffing Categories in Alberta Schools Shown as a Percentage of Schools in Each Type of Jurisdiction

Staffing Category	TYPES OF SCHOOLS[1]											
	County Schools (n=314)		Division Schools (n=276)		Public District Schools (n=451)		Roman Catholic District Schools (n=192)		Other Jurisdiction Schools (n=13)		All Schools (n=1246)	
	N	%	N	%	N	%	N	%	N	%	N	%
Teachers' Aides/ Instructional Aides	29	9.2	147	53.3	199	44.1	109	56.8	2	15.4	486	39.0
School Aides/ General Aides	31	9.9	73	26.4	248	55.0	51	26.6	7	53.8	410	32.9
Library Aides or Assistants	64	20.4	86	31.2	345	76.5	68	35.4	10	76.9	573	46.0
Laboratory Aides/ Laboratory Technicians	2	0.6	-	-	62	13.7	9	4.7	1	7.7	74	5.9
Resource Centre Aides/ AV Aides	3	1.0	2	0.7	62	13.7	5	2.6	-	-	72	5.8
Clerical Aides	8	2.5	9	3.3	167	37.0	62	32.3	7	53.8	253	20.3
Typists/Secretaries	236	75.2	162	58.7	405	89.8	145	75.5	10	76.9	958	76.9
Supervision Aides	22	7.0	9	3.3	11	2.4	2	1.0	-	-	44	3.5
Business Managers	62	19.7	14	5.1	23	5.1	13	6.8	-	-	112	9.0

[1] The number of schools for each responding jurisdiction was computed from the Department of Education's LIST OF OPERATING SCHOOLS IN ALBERTA 1974-75.

Divisions, the large units of rural school administration. Examples of these are the "library aides or assistants," "laboratory aides/laboratory technicians," and "clerical aides" categories. On the other hand, a somewhat greater proportion of County and Division schools than Public and Roman Catholic District schools were likely to have "supervision aides"; this may reflect the greater need in rural areas for supervision of bus loading and unloading and for noon-hour supervision.

When the two types of large rural jurisdictions are compared, Divisions had a higher proportion of "teachers' aides/instructional aides" (53 vs. 9 percent), "school aides/general aides" (26 vs. 10 percent), whereas County schools were more likely to have "typists/secretaries" (75 vs. 59 percent), "supervision aides" (7 vs. 3 percent) and "business managers" (20 vs. 5 percent).

Comparison between the two types of urban jurisdictions reveals that a greater proportion of Public District schools had "school aides/general aides" (55 vs. 27 percent), "library aides or assistants" (77 vs. 35 percent), "laboratory aides/laboratory assistants" (14 vs. 5 percent), "resource centre aides/AV aides" (14 vs. 3 percent), and "typists/secretaries" (90 vs. 75 percent). On the other hand, a greater proportion of Roman Catholic District schools had "teachers' aides/instructional aides" (57 vs. 44 percent).

Superintendents also provided figures on the numbers of personnel employed in their jurisdiction in each of the paraprofessional and support staff categories. The total number of paid paraprofessionals and support personnel employed in the 1,246 schools for which data were available was 3,461. Not surprisingly, in view of the figures provided in Table 3.2, "typists/secretaries" accounted for the greatest number of such personnel (1,186), representing just over a third of the total. "Teachers' aides/instructional aides" accounted for 23 percent, "library aides or assistants" for 19 percent, "school aides/general aides" for 15 percent, and each of the remaining categories for 3 percent or less, with only 42 "business managers" reported representing one percent of the total of paraprofessional and support personnel.

Year of initiation of paraprofessional and support staff categories. Of the nine categories of paraprofessionals and support personnel about which information was sought, most were initiated in the various parts of the province and in different types of jurisdictions over a period of years, many as recently as the present year. The earliest to be introduced into the schools of the province was the "typists/secretaries" category with at least one jurisdiction reported having such positions in their schools as early as 1931; however, several jurisdictions introduced this category of personnel in 1975 and others have yet to do so. "School aides/general aides" have been introduced gradually between 1955 and the present year and "library aides or assistants" from 1960 to date. Most of the others were introduced gradually from about the mid-1960's to the present time with a fair concentration in the 1970's. This is not surprising in light of other information provided by some superintendents that their "school aides/general aides" "library aides or assistants"

and/or "resource centre aides/AV aides" were being paid from Equal Opportunity Fund grants. The returns also suggest that many of the paraprofessional and support staff categories were first introduced by the larger urban school jurisdictions.

Additional paraprofessional staffing categories. Eight of the responding jurisdictions included additional paraprofessional staffing categories found in their schools. Among these were "counsellor aides who work with Native children," "Early Childhood Services aides," "instructional assistants in industrial arts and band," "school aide-chefs," "school aide-mechanics," "school media aides," "AV technicians," "educational TV directors," and "curriculum workers." Superintendents indicated that most of these staffing categories have been introduced since 1971.

Volunteer Personnel

Table 3.3 presents the number of schools, by type of jurisdiction, which superintendents identified as using volunteers. This table probably does not reflect very accurately the number and extent of volunteer involvement in schools for a number of reasons. Some superintendents responded that since the use of these personnel was largely under each school's control they did not have an accurate count of such personnel for their jurisdiction. Typical of superintendents' responses were:

> We have no full-time volunteers but almost every one of our schools has parent volunteers that assist teachers and the librarians from time to time. It would be most difficult for us to ascertain how many such people would be involved in a year . . .
>
> Varies . . . usually short term, specific task-oriented rather than ongoing.
>
> We have two volunteer aides in each day, though not always the same two.

Of the four volunteer categories about which information was sought, "school aides/general aides" seemed to be the most common in Alberta, being found in about one-eighth of the schools about which data were provided. Next in order of use were volunteer "teachers' aides/instructional aides" reported for about one school in ten. "Supervision aides" and "resource centre aides" were the least used of the volunteer staffing categories, each reportedly found in under one percent of schools.

Utilization of volunteer personnel in different types of jurisdictions. Comparisons across the jurisdictions reveal that volunteer personnel in general seem to be found in a greater proportion of urban than rural jurisdiction schools. This is particularly true for the category of "school aides/general aides." As for the two types of large units of rural administration, neither reported using "supervision aides" and only School Divisions had "school aides/general aides" and "resource centre aides"; the remaining category, "teachers' aides/instructional aides,"

Table 3.3

Categories of Volunteer Staff in Alberta Schools Shown as a Percentage of Schools in Each Type of Jurisdiction

Staffing Category	TYPES OF JURISDICTIONS[1]											
	County Schools (n=314)		Division Schools (n=276)		Public District Schools (n=451)		Roman Catholic District Schools (n=192)		Other Jurisdiction Schools (n=13)		All Schools (n=1246)	
	N	%	N	%	N	%	N	%	N	%	N	%
Teachers' Aides/ Instructional Aides	3	1.0	24	8.7	15	3.3	72	37.5	1	7.7	115	9.2
School Aides/General Aides	-	-	7	2.5	78	17.3	63	32.8	4	30.8	152	12.2
Supervision Aides	-	-	-	-	-	-	2	1.0	-	-	2	0.2
Resource Centre Aides	-	-	1	0.4	1	0.2	-	-	2	15.4	4	0.3

[1] The number of schools for each responding jurisdiction was computed from the Department of Education's LIST OF OPERATING SCHOOLS IN ALBERTA 1974-75.

was found in a higher proportion of Division schools than County schools.

Schools in Roman Catholic Districts more than schools in Public Districts utilized the two main categories of volunteer personnel; over thirty-seven percent of schools in Roman Catholic Districts compared with three percent in Public Districts used "teachers' aides/instructional aides" and thirty-three percent in Roman Catholic Districts compared with seventeen percent in Public Districts used "school aides/general aides."

Year of initiation of volunteer personnel categories. In general, the range of years given for the initiation of volunteer staffing categories was much narrower than for professional or paraprofessional categories. With the exception of the volunteer "school aides/general aides," initiated in 1958, no category was initiated in any type of jurisdiction in Alberta before 1970.

Additional volunteer staffing categories. Information was viewed from eight jurisdictions concerning additional volunteer staffing categories utilized in these jurisdictions. The most frequently mentioned category was volunteer "library aides." Volunteer "student aides" were mentioned by two jurisdictions, and volunteer "clerical aides" and a volunteer "AV director" by one jurisdiction. Also mentioned was the use of "community resource personnel" and of a "civilian advisory committee." All of these volunteer staffing categories had been initiated since 1971.

Staffing Practices Which Have Been Discontinued

In response to the request for this information, thirteen jurisdictions in the province provided details on differentiated staffing practices which were initiated in their schools and later terminated. The most common of those mentioned were paid paraprofessional positions such as "teacher aide," "school aide," "library aide," "laboratory aide," "paraprofessional band instructor" and "business manager." In all but one instance the positions were introduced in the 1970's and typically discontinued one or two years later. The exception was "school aides" which in one jurisdiction were introduced in 1969 and terminated six years later.

The most common reason given for the termination of the paraprofessional staffing practices reported was financial restraints. In two cases the paraprofessional positions were created as stop-gap measures. One of these involved hiring a paraprofessional band instructor for a year until he could be replaced by a certified teacher. In another case a teacher aide was assigned to a Grade 1 classroom for a year and although the arrangement was indeed satisfactory, when the enrollment dropped, the aide was no longer considered necessary.

Several professional staffing practices such as the use of "department heads," "reading specialist," "instructional media centre coordinator" and "team teaching" were also mentioned as having been initiated, typically in the 1970's, and terminated usually one or two years later; the exception was "department heads" initiated in one

jurisdiction in 1964 and terminated in 1970. The reason given for termination of all but one of the professional staffing categories listed was financial restraints; the exception, "team teaching" was reported to have been terminated in one case because of lack of inservice training and in another because the teachers involved had left the school.

Three jurisdictions reported the discontinuance of volunteer aide programs. All three had been initiated in 1972 and terminated a year or two later. No reason for termination was given for two of these. In the third instance the availability of Federal Local Improvement Program funding made it possible for the volunteer aides to become paid aides.

Summary

Ninety-four percent of Alberta superintendents replied to a survey questionnaire which attempted to ascertain the extent of differentiated staffing in their jurisdictions. Some aspects of the questionnaire posed problems for the larger jurisdictions since the information sought was not always available.

From information which they provided, a list of schools having staffing practices which differed in a marked degree from traditional staffing practices in the use of professional or paraprofessional personnel was compiled. While the most commonly mentioned practice was the utilization of aides, it was evident from the variety of staffing practices mentioned that the concept of differentiated staffing had been interpreted differently by many respondents.

Specialization of professional personnel was on a horizontal basis with most staff in the categories of "remedial and resource teachers," "school counsellors," and "subject area consultants." In general, the present emphasis in staffing would seem to be to provide assistance to teachers through peers or colleagues who specialize in individual student needs. The majority of specialized professional personnel categories were introduced after 1960.

Seventy-seven percent of all schools employed "typists/secretaries" and 46 percent employed "library aides or assistants." "Teachers' aides/instructional aides" were employed in 39 percent of Alberta schools and "school aides/general aides" in 33 percent. In comparison, only 4 percent of schools employed "supervision aides." Approximately 40 percent of all paid paraprofessionals were either "teachers' aides/instructional aides," "school aides/general aides," or "clerical aides." "Library aides or assistants" and "resource centre aides/AV aides" accounted for approximately 20 percent of all paid paraprofessionals. While the "typists/secretaries" category was inaugurated in many districts prior to or during the 1950's, most other categories of paraprofessional staff were not initiated until at least the mid-1960's.

Information on the utilization of volunteers in Alberta schools was less accurate than other data since this area was under the jurisdiction of individual principals. Superintendents reported that 12 percent of schools had volunteers who worked in the capacity of "school aides/general aides," and 9 percent had volunteer "teachers' aides/instructional aides." In general volunteers more often worked in urban schools. Most volunteer programs started in the 1970's.

Sixteen differentiated staffing practices were identified as having been discontinued, chiefly due to financial restraints.

Based on the information provided by superintendents, Alberta schools have not formally employed to any large extent the categories of professional personnel related to differentiated staffing.

CHAPTER 4

SCHOOL REPORTS ON ACTUAL AND PREFERRED STAFFING PRACTICES

This chapter reports the findings of the survey of Alberta principals and teachers. The questionnaire used in the survey was based on the review of literature on differentiated staffing and was designed to provide data about present and preferred staffing practices, and attitude orientations toward various aspects of differentiated staffing.

The questionnaire was administered to (a) 243 principals representing a systematic selection of every fifth school from the provincial Department of Education's master list of schools arranged by jurisdiction; and (b) 638 teachers comprising the entire staffs of 27 schools, 25 of which were randomly selected from the 243 schools just mentioned; and (c) 63 principals whose names appeared on the list of schools nominated by superintendents as having some feature of differentiated staffing and who were not already included in the sample of principals. Reference to this list of schools has already been made in the preceding chapter.

Replies were received in time for data analysis from 80 percent of the principals in the systematically selected group; 55 percent of the teachers; and 86 percent of the nominated principals. The map on the following page illustrates the geographical location of the schools surveyed. Table 4.1 shows the total number of principals and teachers surveyed and the various categories used in the analysis of the data.

As noted in the preceding paragraphs, the sample of principals was constructed in such a way as to favour the inclusion of principals known to be involved with some aspect of differentiated staffing. That is, of the 255 principals responding to the questionnaire, 53 were from the nominated list. This characteristic of the sample was valuable in highlighting differences between nominated and systematically selected

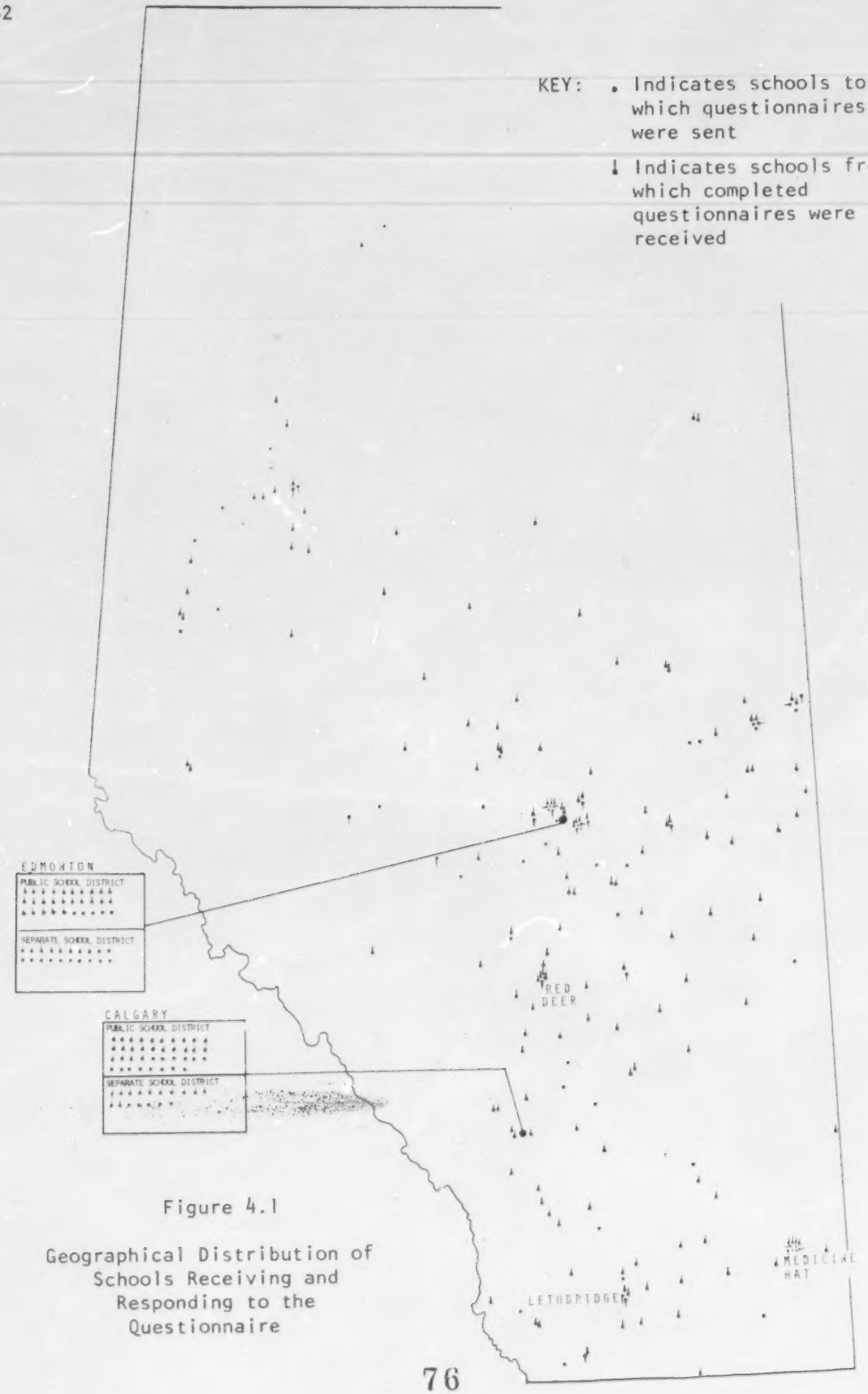

Figure 4.1

Geographical Distribution of Schools Receiving and Responding to the Questionnaire

Table 4.1

Number of Respondents by Category

Category	Number	
	Principals	Teachers
With Aides	149	91
Without Aides	103	251
Elementary with aides	83	40
Secondary with aides	37	44
Elementary without aides	45	66
Secondary without aides	35	163
Female with aides	8	51
Male with aides	141	37
Female without aides	12	121
Male without aides	91	127
Nominated	53	--
Systematically selected	202	--
Total	255[1]	342[1]

[1] Because some respondents used the "Special" and "Other" alternatives in the questionnaire, the total number in the category sub-groups does not always equal the total number shown for principals and teachers.

principals. On the other hand, the sample was not constructed nor the analysis of the data conducted with a view to deriving statistical generalizations. The following pages therefore focus on describing practices and attitudes associated with differentiated staffing as reported by the survey respondents. The analysis of the information they supplied yielded pertinent indicators of the status of and potential for differentiated staffing in Alberta.

USE OF PARAPROFESSIONAL STAFF

Respondents were requested to supply information regarding their present and preferred use of "paid aides." The findings reported in this chapter regarding aides therefore exclude the use of volunteer aides and regular secretarial services provided by personnel with designations other than "paid aide," for example, "school secretary."

Number of Aides Used

The survey asked the following question:

> How many paid aides do you regularly use? (Circle)
>
> 0 1 2 3 4 5 6 7 8 9 or more

Forty percent of the respondents regularly used paid aides. Proportionately more principals (60 percent) than teachers (27 percent) reported they regularly used one or more paid aides. Principals tended to use more aides than did teachers. Twenty-nine percent of principals reported that they regularly used one aide, and 16 percent stated that they regularly used two aides. Twenty-one percent of the teachers reported they regularly used one aide, and 4 per cent reported regular use of two aides. Fifteen percent of the principals and one percent of the teachers reported they regularly used more than two aides. The mean number of aides used by principals was 2.1, and the corresponding mean for teachers was 1.2.

Number of Hours Aides Were Used

The survey asked the following question:

> During an average school day approximately how many hours does an aide(s) work for you? (Circle)
>
> 0 1 2 3 4 5 6 7 8 9 or more

Proportionately more principals (52 percent) than teachers (24 percent) reported that aides worked for them one hour or more. Proportionately more principals than teachers had aides working for them for longer periods. Seventy-six percent of the principals using aides

reported that aides worked for them two or more hours per day compared to 32 percent of the teachers who made the same claim. The mean number of hours that aides were used by principals was 3.6 and the corresponding mean for teachers was 1.7.

Number of Hours Preferred for the Use of Aides

The survey asked the following question:

> During an average school day, about how many hours do you think you could effectively utilize the services of trained aide(s)? (Circle)
>
> 0 1 2 3 4 5 6 7 8 9 or more

While 16 percent of the respondents indicated they could not effectively utilize the services of trained aides during an average school day, 84 percent felt they could utilize the services of trained aides for one or more hours during an average school day. Principals preferred more aide time than did teachers. Whereas 29 percent of the principals and 67 percent of the teachers preferred one to two hours of aide time, 55 percent of the principals and only 17 percent of the teachers indicated they could utilize aides for three or more hours per day.

Principals without aides reported they could effectively utilize the services of trained aides for a mean of 2.4 hours per day. Those with aides reported they used them for an average of 3.6 hours per day and could use them for an additional hour per day for a total of 4.6 hours.

Teachers without aides reported they could effectively use aides for an average of 1.5 hours per day. Teachers with aides reported they used them 1.7 hours per day and that they could use them for approximately half an hour more per day for a mean total of 2.3 hours.

Table 4.2 illustrates some of the above findings. It also demonstrates that principals who had aides tended to use more aides and more aide time than did teachers who had aides, and also that principals preferred about twice the amount of total aide time preferred by teachers.

Table 4.2

Hours of Actual and Preferred Use of Aides

	Principals		Teachers	
Mean Number of	With Aides	Without Aides	With Aides	Without Aides
Paid Aides	2.1	0	1.2	0
Hours Aides Used	3.6	0	1.7	0
Preferred Hours	4.6	2.4	2.3	1.5

Estimated Distribution of Aides' Time

The survey asked the following question:

> Please rank the following activities according to (a) the amount of time aides ACTUALLY spend performing them for you and (b) the amount of time you would PREFER that aides spend on them for you.
>
> Rank as follows: 1 = most time; 2 = next most time; 3 = . . . etc.; leave blanks to indicate no time.

Activity	Rank ACTUALLY	Rank PREFERRED
Preparing instructional materials	_____	_____
Setting-up, cleaning-up	_____	_____
Assisting students	_____	_____
Supervising students	_____	_____
Keeping records	_____	_____
Marking student work	_____	_____
Planning for instruction	_____	_____
(Other) _____	_____	_____

Thirty-seven percent of the principals with aides estimated the aides working for them spent most of their time (rank = 1) "Preparing instructional materials." The percentage of principals dropped sharply to 14 percent for "Assisting students" and to 8 percent for "Keeping records." The remaining four activities received estimates as follows: "Supervising students," 7 percent; "Setting-up, cleaning-up," 5 percent; "Marking student work," 4 percent and "Planning for instruction," zero percent.

The percentage of teachers with aides who estimated that "Preparing instructional materials" took most of their aides' time was remarkably similar to that of the principals with aides (36 percent). Likewise "Assisting students" received 15 percent. The percentages of teachers with aides who estimated the remaining five activities took most of their aides' time were as follows: "Setting-up, cleaning-up," 11 percent; "Keeping records," 9 percent; "Marking student work," 7 percent; "Supervising students," 3 percent and "Planning for instruction," 1 percent.

"Preparing instructional materials" and "Assisting students" were estimated, in that order, by the largest and the next largest percentages of both principals and teachers as the activities upon which their aides actually spent most of their time.

Preferred Distribution of Aides' Time

Twenty-eight percent of the principals without aides gave highest priority regarding the preferred allotment of most aide time to "Preparing instructional materials." Twelve percent gave highest priority to "Setting-up, cleaning-up." "Assisting students" received 9 percent of the highest priority responses from principals without aides. The remaining four activities received less than 9 percent of the highest priority responses from principals without aides.

When the responses from principals with aides were examined, it was found that 31 percent gave highest priority to "Preparing instructional materials"; and 14 percent on "Assisting students." The remaining activities received less than 14 percent of the highest priority responses from teachers with aides.

A comparison across the two groups of principals and the two groups of teachers revealed that "Preparing instructional materials" received highest priority from the most respondents in each of the four groups and that "Assisting students" received highest priority from the next largest proportion of respondents in three of the groups. "Planning for instruction" received the smallest proportion of first priority responses in each of the four groups.

Table 4.3 presents the seven tasks rank ordered according to both the estimated amount of time aides actually spend on the tasks and the preferred amount of time they should spend on these tasks.

In summary, principals and teachers agreed in their estimates that aides spend most of their time (1) "Preparing instructional materials" and (2) "Assisting students." Both groups ranked "Supervising students" fourth. "Planning for instruction" was ranked by both groups as the task receiving the least amount of aide time. Overall both groups tended to agree on their rankings by reporting similar estimates of aide time allocated to the seven tasks.

When the same seven activities were rank ordered by principals and teachers according to their preferences regarding the amount of aide time aides should spend on the tasks, "Preparing instructional materials" was ranked first by both groups, and "Planning for instruction" was ranked seventh. "Supervising students" was ranked fifth by both groups. "Assisting students" was ranked second by principals and third by teachers. Teachers ranked "Setting-up, cleaning-up" as their second choice. Although some differences in ranking are evident in the table, overall, principals and teachers indicated similar preferences regarding the relative allotment of aide time to the seven tasks.

Table 4.3

Actual and Preferred Activities of Aides Ranked According to Time

Activity	Rank			
	Actual		Preferred	
	Principal	Teacher	Principal	Teacher
Preparing instructional materials	1	1	1	1
Setting-up, cleaning-up	5	6	3	2
Assisting students	2	2	2	3
Supervising students	4	4	5	5
Keeping records	3	5	4	6
Marking student work	6	3	6	4
Planning for instruction	7	7	7	7

Preferences of Teachers with Aides and Teachers without Aides

An analysis of the teacher responses was performed to determine if the preferences for time spent by aides on the seven activities was different for teachers with aides and those without aides. Table 4.4 demonstrates that both groups of teachers prefer that most aide time be spent on preparing instructional materials. A major difference between the two groups occurred with their second choice. Teachers without aides gave second priority to "Setting-up, cleaning-up" which was ranked 5.5 by teachers with aides. The second choice of teachers with aides was "Supervising students" which was ranked 5.5 by teachers without aides. Both groups indicated that the least amount of aide time should be spent on "Planning for instruction."

Table 4.4

Teacher Preferences for Aide Time on Various Activities

Activity	Rank: Teachers With Aides	Rank: Teachers Without Aides
Preparing Instructional Materials	1	1
Setting-Up, Cleaning-Up	5.5	2
Assisting Students	3	4
Supervising Students	2	5.5
Keeping Records	5.5	5.5
Marking Student Work	4	3
Planning for Instruction	7	7

PREFERRED TYPES OF PERSONNEL

The survey asked respondents to rank the following six types of personnel according to the order in which they would like to see them added to the staff of their school: (a) Teacher interns; (b) Master (leader) teachers; (c) Consultants/specialists; (d) Instructional aides; (e) Supervisory aides; and (f) Clerical aides.

The following analysis is based on the percentages of principals with aides and without aides and on the percentages of teachers with aides and without aides who gave first priority to the various types of personnel.

The personnel category "Master (leader) teachers" received the most first priority responses from principals without aides, with 42 percent of the principals choosing this type as their first priority. "Consultants/specialists" and "Clerical aides" followed with 16 percent first priority responses given to each. These were then followed by "Instructional aides" with 14 percent, "Supervisory aides" with 8 percent and "Teacher interns" with 7 percent.

As with the principals without aides, the type of personnel to receive the most first priority responses by principals with aides was "Master (leader) teachers" which received 42 percent. "Consultants/specialists" and "Instructional aides" each received 17 percent. These were followed by "Supervisory aides" with 11 percent, "Clerical aides" with 9 percent and "Teacher interns" with 8 percent.

The type of personnel favoured by the greatest proportion of teachers without aides was "Clerical aides" which received 26 percent of first priority responses. "Master (leader) teachers" received 20 percent of first choices and "Instructional aides" 17 percent. These were then followed by "Consultants/specialists" with 14 percent, "Supervisory aides" with 13 percent and "Teacher interns" with 11 percent.

The pattern of responses for teachers with aides was somewhat different. Twenty-five percent gave first priority to "Instructional aides," 23 percent to "Clerical aides" and 21 percent to "Consultants/specialists." "Master (leader) teachers" received 13 percent and were followed by "Supervisory aides" with 12 percent and "Teacher interns" with 7 percent.

Table 4.5 presents the six types of personnel rank ordered by principals and teachers. It is clear there was little agreement between the mean ranks of the two groups. Whereas principals gave top priority to "Master (leader) teachers," teachers ranked "Clerical aides" as most preferred. Principals and teachers both gave second preference to "Instructional aides," however the third choice of teachers, "Supervisory aides," was ranked as least preferred by principals. Teachers clearly indicated their preference for aides by ranking "Clerical," "Instructional," and "Supervisory" aides first, second and third respectively. Principals on the other hand, tended to prefer the addition of certificated personnel. Teacher interns received relatively low rankings from both principals and teachers.

Table 4.5

Preferred Types of Personnel Ranked by Principals and Teachers

Type of Personnel	Rank	
	Principals	Teachers
Teacher Interns	4.5	5
Master Teachers	1	6
Consultant/Specialists	3	4
Instructional Aides	2	2
Supervisory Aides	6	3
Clerical Aides	4.5	1

An analysis was conducted to determine whether the preferences which teachers had for the six types of personnel were dependent on whether or not they had aides. Table 4.6 illustrates that the first preference of teachers without aides was for "Clerical aides," whereas the first preference of teachers with aides was for "Instructional aides." Both groups preferred aides over professional personnel.

Table 4.6

Preferred Types of Personnel Ranked by Teachers With Aides and Without Aides

Types of Personnel	Ranking	
	Teachers With Aides	Teachers Without Aides
Teacher Interns	5	4
Master Teachers	6	5
Consultant/Specialists	4	6
Instructional Aides	1	2
Supervisory Aides	3	3
Clerical Aides	2	1

ATTITUDES

This section reports findings based on an assessment of the attitude orientations of respondents toward 12 aspects of differentiated staffing which were derived from the review of the literature.

A factor analysis of the responses to the 12 items revealed that 10 items formed two independent 5-item dimensions which were labelled Professional Autonomy and Willingness. The two remaining items were labelled Effectiveness and Link.

Respondents indicated their opinions by selecting a number from a six-point scale anchored at the low end by "Disagree" and at the high end by "Agree." Respondents who used 1 and 2 on the scale were classified as disagreeing with the item and respondents who used 5 and 6 were classified as agreeing with it. Furthermore an analysis was made of the middle group to determine tendencies to disagree by choosing 3 and agree by choosing 4.

Professional Autonomy

The phrase Professional Autonomy refers to the attitude orientation which was found by factor analysis to consist of the following five questionnaire items:

> Professional school-based personnel (teachers and administrators) should have more responsibility and discretion in decisions relating to . . .
>
> Curriculum;
> Teaching Methods;
> School Rules and Regulations;
> School Budgeting; and
> School Staffing.

Respondents tended to indicate moderately strong agreement with the Professional Autonomy dimension which measured their desire for greater school autonomy in decisions. The dimension mean for all respondents was 4.81 on the six-point scale.

The responses to each of the five items which formed the Professional Autonomy dimension were examined to determine the proportion of respondents who tended to disagree and the proportion who tended to agree with it.

The percentage of respondents agreeing with the items forming the Professional Autonomy dimension ranged from 63 percent to 74 percent. The range for those disagreeing was from 3 to 6 percent. The range of responses in the middle group was from 22 percent to 29 percent. Non-responses ranged from 2 to 3 percent.

In general the pattern of responses from principals and teachers was similar. The largest difference in agreement between principals and teachers occurred with the "School Staffing" item. Nine percent more principals than teachers agreed with the item. The largest difference in disagreement was only 2 percent.

Of the respondents in the middle category, from 8 percent to 11 percent more indicated mild agreement than disagreement with each of the five items. This pattern was similar for principals and teachers for each of the five items.

Willingness

The descriptor Willingness refers to the attitude orientation which was found by factor analysis to consist of the following five questionnaire items:

> The quality of instruction in most schools could be improved by utilizing different staffing patterns.
>
> Alternative staffing patterns should provide a better match between salaries and responsibilities.
>
> I would participate in the implementation of alternative staffing patterns.
>
> There should be a way to staff schools so that good teachers can assist others in improving their teaching skills.
>
> The assignment to non-certificated personnel of non-instructional tasks traditionally expected of teachers would make better use of scarce funds.

Respondents tended to indicate mild agreement with the Willingness dimension which measured their willingness to participate in the implementation of alternative staffing patterns characterized by features pertinent to differentiated staffing. The mean dimension response was 4.0 on the six point scale.

Whereas the bulk of respondents tended to agree with the items forming the Professional Autonomy dimension and few disagreed, the pattern of responses to items forming the Willingness dimension was markedly different.

The percentage of respondents agreeing with the Willingness dimension items ranged from 33 percent for the item regarding "a better match between salaries and responsibilities" to 66 percent for the item regarding "a way to staff schools so that good teachers can assist others in improving their teaching skills." The range for those disagreeing was from 6 percent regarding good teachers assisting others to 19 percent regarding a better match between salaries and responsibilities. In the middle group, the range

was from 26 percent for the item regarding good teachers assisting others, to 45 percent for the item concerning improving the quality of instruction by utilizing different staffing patterns. Non-responses ranged from 3 percent to 6 percent.

The patterns of responses from principals and teachers were similar for some and different for other items forming the Willingness dimension. The largest difference between principals and teachers in agreement occurred with the item concerning good teachers assisting others. Twelve percent more principals agreed with the item than did teachers.

The largest difference in disagreement concerned the willingness of respondents to participate in alternative staffing patterns. Eight percent more teachers than principals indicated they were not willing to participate.

Of the respondents in the middle category, from 5 percent to 15 percent more indicated mild agreement than disagreement with each of the five items forming the Willingness dimension. This pattern was similar for principals and teachers for each of the items except for the item regarding a better match between salaries and responsibilities. Of the principals in the middle category, 12 percent more indicated mild agreement for this item than mild disagreement, whereas 1 percent more of the teachers in the middle category indicated mild disagreement than mild agreement.

Effectiveness

The descriptor Effectiveness refers to the following questionnaire item:

> The effectiveness of teachers could be improved by assigning some of their present tasks to non-certificated personnel.

Respondents tended to indicate moderately strong agreement with the Effectiveness item which tapped their desire to differentiate the teacher's role by utilizing non-certificated (paraprofessional and/or volunteer) personnel for certain tasks. The mean response for this item was 4.7 on the six-point scale.

Sixty-seven percent of the respondents agreed that the effectiveness of teachers could be improved by assigning some of their present tasks to non-certificated personnel, and 8 percent disagreed. Of the respondents in the middle group, 10 percent more indicated mild agreement than mild disagreement with the item. Three percent did not respond. Principals and teachers had similar response patterns.

Link

The descriptor Link refers to the following questionnaire item:

> Schools should have a better way of directly linking teacher skills to instructional responsibilities.

Respondents tended to indicate moderately strong agreement with the Link item which tapped their desire to differentiate the teacher's role by improving the way in which teacher skills are linked to instructional responsibilities. The mean response to this item was 4.6 on the six-point scale.

Sixty-three percent of the respondents agreed that schools should have a better way of directly linking teacher skills to instructional responsibilities and 4 percent disagreed. Of the respondents in the middle category, 16 percent more indicated mild agreement than mild disagreement. Four percent did not respond. The response patterns for principals and teachers were similar.

An analysis of the relative weight given to each of the twelve attitude items by principals and teachers revealed close agreement between the two groups on all but two of the items. In general, both groups tended to agree more strongly with the items concerning decisions which formed the Professional Autonomy dimension and with the Effectiveness item, and less strongly with the items making up the Willingness dimension. Principals, however, gave more weight to the item regarding good teachers assisting others (rank = 2) and less weight to the item concerning decisions regarding curriculum (rank = 8). Teachers on the other hand, gave more weight to the curriculum item (rank = 3) and less weight to the item concerning good teachers assisting others (rank = 8). Principals, as might be expected, thus seemed more concerned with the utilization and development of staff whereas teachers tended to be more concerned with development of curricula.

ATTITUDES AND THE USE OF AIDES

Analyses were conducted to determine if principals and teachers with aides differed from those without aides in their attitude orientations toward the foregoing features of differentiated staffing (see previous keywords). The analyses revealed that there was no significant difference ($p \leq .05$) in attitude orientation when the responses of principals with aides were compared to those of principals without aides and responses of teachers with aides were compared to those of teachers without aides.

PRESENT EXTENT OF COLLABORATION IN PLANNING AND INSTRUCTION

Differentiated staffing as conceptualized and described in the literature involves comparatively greater degrees of collaboration among school personnel than traditional staffing patterns. In order to ascertain the present extent of such collaboration in Alberta schools, teachers were asked to respond to the following two questions regarding the degree to which they collaborated in (a) planning and in (b) instruction:

Teachers vary in the extent to which they collaborate with other teachers and aides in planning for instruction. Please circle the item number which best describes your pattern of planning for instruction.

1. Nearly all my planning for instruction is done independently.

2. A small part of my planning for instruction is done in collaboration with others.

3. A substantial part of my planning for instruction is done in collaboration with others.

4. Nearly all of my planning for instruction is done in collaboration with others.

Teachers vary in the extent to which they collaborate with other teachers and aides in instruction. Please circle the item number which best describes your pattern of instruction.

1. Nearly all of my instruction is done independently.

2. A small part of my instructing is done in collaboration with others.

3. A substantial part of my instructing is done in collaboration with others.

4. Nearly all of my instructing is in collaboration with others.

Responses to the four-point scales of the two questions indicated that these Alberta teachers collaborated with other teachers and aides to only a small degree in planning for instruction. Forty-five percent of respondents indicated that nearly all their planning was done independently and a further 40 percent collaborated for "a small part" of their planning. In terms of collaboration in instruction, 73 percent did nearly all their instruction independently and 22 percent collaborated with others for "a small part" of their instructing. While 13 percent of the respondents indicated that "a substantial part" or "nearly all" of their planning was done in collaboration with others, only 3 percent actually collaborated in instructing to the same extent.

It is not surprising that when the responses of teachers with aides were compared to those of teachers without aides, it was found that the former group tended to collaborate more than their colleagues both in planning and in instruction.

SUMMARY

A survey questionnaire to ascertain present and preferred staffing practices in schools and staff attitude orientations toward various aspects of differentiated staffing was administered to a sample of Alberta principals, to principals nominated by superintendents, and to a sample of school staffs. In all, 255 principals and 342 teachers replied to the questionnaire.

In general, proportionately more principals used aides, used greater numbers of aides, and employed them for longer periods of time during the school day than did teachers. Principals also would like to use aides for approximately twice the time preferred by teachers.

Both principals and teachers indicated that aides spent most of their time "Preparing instructional materials" and "Assisting students," and regardless of whether or not they had previously used aides, both principals and teachers felt that these two tasks should absorb most of an aide's time. They also preferred that "Planning for instruction" should be allocated least aide time.

Regardless of whether or not they used aides, approximately 60 percent of principals and 20 percent of teachers gave first preference to the addition of a professional staffing category, either "Master (leader) teachers" or "Consultants/specialists," while almost 60 percent of teachers and 40 percent of principals chose the addition of one of the paraprofessional staffing categories of "Instructional," "Clerical" or "Supervisory aides" as their first preference.

At least 63 percent of respondents agreed, and at most 6 percent disagreed, with the attitude items related to greater in-school responsibility and discretion in decisions on curriculum, teaching methods, school rules and regulations, school budgeting and school staffing.

There was less consistency in the responses for the attitude items related to an acceptance of and willingness to participate in the implementation of alternative staffing patterns. Sixty-six percent of respondents agreed with the provision of avenues for collegial assistance within schools. Approximately 40 percent saw the utilization of alternative staffing patterns as improving the quality of instruction, or were willing to participate in the implementation of such a staffing pattern. On the two items related to finances, one-half of the respondents felt that assigning non-instructional tasks to non-certificated personnel would make better use of scarce funds but only one-third agreed that alternative staffing patterns should provide a better match between salaries and responsibilities.

Over 60 percent of the respondents agreed that teacher effectiveness could be improved by assigning some of their present tasks to non-certificated personnel and that schools should have a better way of linking teacher skills and instructional responsibilities.

At present, few teachers collaborate with other teachers and aides to any substantial extent in planning and in instructing.

CHAPTER 5

PROVINCIAL LEGISLATION, POLICIES AND OPINIONS

Three provincial organizations, the Department of Education, the Alberta Teachers' Association and the Alberta School Trustees Association, are, by virtue of their legal mandates and the interests of their members, concerned with current and future staffing practices in Alberta public schools. This chapter considers the policies and dispositions of these organizations towards aspects of differentiated staffing. The chapter is divided into three major sections. The first section reports written policies of these organizations concerning various aspects of school staffing. The second section considers a number of problems related to differentiated staffing practices in Alberta as perceived by senior staff members in each of the three organizations. Some consideration is also given in this chapter to present trends and possible future developments as perceived by officials of the three organizations. In the final major section, an attempt is made to synthesize and summarize the information presented.

CURRENT WRITTEN POLICIES

Policies reported in this section were extracted from *The School Act (1970)* and Departmental Regulations which are considered the major relevant policy documents for the Department of Education, the 1975 *Member's Handbook* of the Alberta Teachers' Association, and the 1974 *Handbook* of the Alberta School Trustees Association, both of which contain the official policies of these organizations.

Department of Education Policy

Section 93 of the *British North America Act 1867* confers the right of Canadian provinces to ". . . exclusively make laws in relation to education . . .," and *The Alberta Act* of 1905 specifically recognizes this mandate. *The Department of Education Act,* as revised by the Alberta legislature in 1970, assigns the responsibility for educational matters to the Minister of Education and provides in Section 3 for ". . . a department of the public service of the Province called the Department of Education," to administer any regulations the Minister may proclaim in accordance with the powers allocated in Section 7 of the Act. Section 7 states, in part, that:

7.(1) The Minister may make regulations

(b) concerning the certification of teachers and the cancellation or suspension of certificates,

(e) for the establishment, operation, administration and management of schools . . .,

(i) governing the establishment, administration, operation management and control of early childhood service programs,

(k) concerning the certification and special requirements of teachers and the cancellation and suspension of certificates of teachers who are involved in early childhood service programs.

Such regulations are contained either in *The School Act (1970)* or Regulations passed as Orders in Council.

Sections of *The School Act* governing the employment of teachers and other personnel. The Sections of this statute which concern the employment by boards of teachers and persons other than teachers, excluding the Superintendent, Secretary-Treasurer, and Auditor, are:

Teachers. 73. A board shall employ as a teacher only a person who holds a certificate of qualification as a teacher issued under *The Department of Education Act, 1970.*

Persons other than teachers. 65(1)(b)(iii) A board shall appoint such other employees as are required, and each appointment is subject to such terms and conditions as the board prescribes, either generally or affecting a particular appointment.

Regulations governing certification of teachers under *The Department of Education Act*. These regulations are issued as Orders in Council, and define teacher licensing policy as administered by the Department. In addition to various degrees of qualification which may be attained by completing courses in a Faculty of Education in the province or equivalent courses elsewhere, these regulations allow the Minister to issue Letters of Authority, valid for up to one year.

The Powers of the Minister. 9(b) The Minister may issue Letters of Authority to persons of suitable academic and professional or technical attainments not otherwise qualified for teachers' certificates under these Regulations on such terms and conditions as to him seem necessary and proper, such Letters of Authority to have the effect of teachers' certificates.

Early childhood services teachers' qualifications regulations. Also approved as Orders in Council, these regulations specify that:

2. An operator in conducting an early childhood services program may employ as early childhood services teachers only those persons qualified as early childhood services teachers in accordance with these regulations.

3. To qualify as an early childhood services teacher, a person shall have

(a) an Alberta teaching certificate or a letter of authority, and

(b) a special early childhood services diploma . . .

4. To be eligible for a special early childhood services diploma, the holder of an Alberta teaching certificate or a letter of authority shall have completed five full university courses in early childhood specialization or acceptable equivalents.

8. Notwithstanding the other provisions of these regulations, the Minister may, in special circumstances, issue interim permits to teach in an approved early childhood services program.

Additional policies regarding instructional assistants and aides are contained in the *Operational Plans for Early Childhood Services* (Government of Alberta, 1973:38):

For each group of 35 children or fraction thereof, there must be a certified teacher, holding an Alberta Teaching Certificate with a major in Early Childhood Education. In addition to the certificated teacher, other specialized instructional assistants and aides, working under the direction and supervision of the qualified teacher may be required in order to provide a full complement of social, health and educational services.

Tasks of teachers, assistants and aides are also identified in this document (Government of Alberta, 1973:40):

1. Qualified teachers must provide over-all coordination and trouble shooting for the educational services and specifically for (a) diagnosis (b) prescription (c) treatment (d) evaluation as they relate to children in programs.

2. Instructional assistants and/or volunteers may be used as a means of increasing the over-all effectiveness of the total services offered to children and their parents.

In implementing the above policy, the document (Government of Alberta, 1973:39) recommends that staffing units be established according to the following weightings: one certificated teacher 1.0; an instructional assistant (college prepared; Child Development Association or equivalent) 0.5; a paid aide 0.3; and a volunteer aide 0.25. It is suggested that various combinations of these may be used by operators with at least one staffing unit for every 22 children (18 if in a "disadvantaged" area), subject to the constraints of the Regulations and policies noted above.

This document (Government of Alberta, 1973:19) also encourages the involvement of the community on the grounds that:

> Programs are more effective when parents and the local community participate in the actual planning and operation of all phases of the ECS program. Parent involvement and cooperation is particularly essential in programs for disadvantaged children.

This observation may be seen as providing justification for the encouragement of volunteer and parent aide activities in the E.C.S. programs.

The Alberta Teachers' Association Policy

Established by *The Teaching Profession Act of 1936*, the Alberta Teachers' Association is a representative organization for all employed Alberta teachers. Official policies are adopted by representatives of the membership at annual meetings.

Long-range policies. These statements are considered as providing general directions for association action. Policies concerned with staffing tend towards providing a central role for the classroom teacher. Areas considered to constitute exclusive teacher responsibility are detailed in long-range policy statement 14.2 (Alberta Teachers' Association, 1975:148) as follows:

> A teacher has certain responsibilities such as (a) diagnosing learning needs of students, (b) prescribing educational programs for students in accordance with those needs, (c) implementing educational programs, (d) evaluating the results of the educational process no part of which any teacher can neglect or ethically delegate to any teachers' aides.

Other relevant long-range policy statements as contained in the *Members Handbook* (Alberta Teachers' Association, 1975:14-19) state that:

> 5.6 The functions performed by non-professionals in schools must be determined and directed by teachers.
>
> 5.9 The number and type of teachers' aides in school should be determined by teachers.
>
> 14.1 The purpose of teachers' aides is to enable teachers to extend their professional service, thus facilitating the education program.

14.3 The placement of teachers' aides in a school must be at the request of the teachers in the school.

14.4 Teachers' aides are responsible to teachers to whom they are assigned for all actions relating to students.

14.5 Deployment and assignment of duties of teachers' aides is the responsibility of the teachers in the school.

14.6 The assignment of a teachers' aide must have the approval of the teacher to whom the aide is assigned and such teacher shall determine the aide's specific duties.

With the exception of long-range policies 5.6 and 5.9, all policies quoted were adopted by the 1973 Annual Representative Assembly of the Association. Policies 5.6 and 5.9 were adopted in 1970.

Current specific policies. Certain resolutions have been adopted by various Annual Representative Assemblies in order to achieve the long-range goals noted above. These are termed current specific policies and are required to be reaffirmed at five year intervals, if they are to remain part of association policy. Current specific policies relevant to the staffing of schools as contained in the *Members Handbook* (Alberta Teachers' Association, 1975:154-162) are:

2.A.8 BE IT RESOLVED, that the Alberta Teachers' Association negotiate with the Government of the Province of Alberta for the right to issue teaching certificates and to suspend or cancel certificates on grounds of incompetence or unprofessional conduct.
(1970/72)

2.A.15 BE IT RESOLVED, that the Alberta Teachers' Association advocate that, should the Minister of Education be requested to renew letters of authority, he do so only if the teacher has improved his teacher education.
(1968/69/70/75)

2.A.16 BE IT RESOLVED, that the Alberta Teachers' Association attempt to ensure that no person be permitted to commence teaching in a school of this province supported by public funds until he has been granted an Alberta teaching certificate.
(1967/68/69/74)

2.A.18 BE IT RESOLVED, that the Alberta Teachers' Association advocate that only persons holding a valid teaching certificate be permitted to serve as school librarians.
(1967/69/70/73)

5.A.1 BE IT RESOLVED, that the Alberta Teachers' Association advocate that negotiations include all matters which affect the quality of the educational system and the teacher's ability to provide a high level of professional service. Without limiting the generality of the

foregoing, collective agreements negotiated by the Association shall make provision for—

11. Assistance to teachers in the form of teachers' aides.
(1970/73)

5.A.6 BE IT RESOLVED, that the Alberta Teachers' Association oppose the implementation of a system of merit rating for salary purposes.
(1970/75)

5.A.18 BE IT RESOLVED, that the Alberta Teachers' Association defend the right of a teacher to refuse to perform a non-professional task, with the Association being the arbiter of what constitutes a professional task.
(1970/75)

5.A.23 BE IT RESOLVED, that the Alberta Teachers' Association advocate that teachers not be required to provide noon-hour supervision.
(1970/73)

10.A.2 BE IT RESOLVED, that the Alberta Teachers' Association advocate the development of patterns of staff organization which will facilitate increased participation by teachers in decision-making with respect to such items as curriculum development, school organization, school district organization, staffing and school plant and facilities.
(1969/74)

10.A.16 BE IT RESOLVED, that the Alberta Teachers' Association advocate that maximum classroom enrolment be no more than 20 students.
(1972/73/75)

14.A.1 BE IT RESOLVED, that the Alberta Teachers' Association advocate that teachers determine the number and type and function of teachers' aides to be employed in schools.
(1970/75)

14.A.2 BE IT RESOLVED, that the Alberta Teachers' Association recognize that non-certificated personnel may become involved in instructional activities, as resource people provided that: (a) the person has a relevant area of expertise, (b) the involvement is on a short-term basis, (c) the activity is planned, organized, supervised and evaluated by a certificated teacher.
(1967/70/73)

14.A.3 BE IT RESOLVED, that the Alberta Teachers' Association advocate that—

(1) the term "teachers' aides" be used to designate non-certificated personnel of all kinds who directly assist individual teachers or groups of teachers in achieving educational objectives;

(2) specific functions and duties of teachers' aides not be defined by statute or departmental regulation;

(3) assignment of a teachers' aide to a class is not a justification for increasing or failing to reduce class size.
(1971/73/75)

14.A.4 BE IT RESOLVED, that the Alberta Teachers' Association advocate that auxiliary personnel in school libraries in Alberta perform only such duties as are assigned to them by the teacher librarian.
(1973)

15.A.3 BE IT RESOLVED, that the Alberta Teachers' Association advocate that all early childhood education programs, including those for three- and four-year-olds be conducted under the charge of teachers with adequate preparation in early childhood education.
(1973)

15.A.5 BE IT RESOLVED, that the Alberta Teachers' Association urge the implementation of quality standards for early childhood education programs which would include the requirement that such programs employ at least one teacher for each group of 20 children.
(1973)

Directives for action. In addition to long-range and current specific policies, the annual assembly of the Alberta Teachers' Association approves specific directives for action. These policies are reviewed each year. The 1975 *Members Handbook* (Alberta Teachers' Association, 1975:62) contains three directives for action that are concerned with staffing matters:

14.B.1 BE IT RESOLVED, that the Alberta Teachers' Association take action to ensure that teachers' aides do not: (a) diagnose education needs of students, (b) prescribe remediation, (c) carry any instructional responsibility, (d) evaluate the results of instruction.
(1973/74/75)

14.B.2 BE IT RESOLVED, that the Alberta Teachers' Association oppose the employment of teachers' aides when such employment may effect a reduction of certificated staff.
(1973/74/75)

15.B.8 BE IT RESOLVED, that the Alberta Teachers' Association request the Government of the Province of Alberta to provide that all teachers employed under the publicly funded early childhood services program shall be active members of the Alberta Teachers' Association.
(1974/75)

Position papers. The Alberta Teachers' Association has published a number of position papers which are considered as providing ". . . explanatory material for the long-range policy statements and resolutions" (Alberta Teachers' Association, 1975:142).

The position paper "Organization and Administration of Schools" (Alberta Teachers' Association, 1975:173-174) indicates that the association

recognizes a need for diversified school staffing.

> With increasing demands for specialization and high quality service, school organizations will have to make extensive provision for auxiliary and paraprofessional services, giving attention to job specifications of persons in schools. Differentiated responsibilities and improved working conditions are essential if we are to use resources most effectively in the schools of the future.

However, in a position paper specifically concerned with teacher aides, a number of caveats as to the use of such personnel are clearly articulated. Professional tasks are defined as the "diagnosis of students' learning needs, prescription for those needs, implementing educational program, and evaluation of student, program and self," and it is stated unequivocally that "the teacher is not only *totally responsible for these activities, but also in large measure must execute them*" (Alberta Teachers' Association, 1975:187). The teacher aide position paper (Alberta Teachers' Association, 1975:185-190) also identifies, from the perspective of the association, the various historical and social forces impinging on the deployment of paraprofessionals in schools, adopting the general stance that while assistants in non-teaching roles are desirable, and in some circumstances necessary, these roles should be defined by teachers.

The Alberta School Trustees Association Policy

This organization is the representative association of Alberta School Boards. Member representatives advance and adopt policies at the annual meeting of the association and all official policies are contained in the association *Handbook* (Alberta School Trustees Association, 1974) from which the following relevant statements are taken.

Staffing policies. The basic values which underlie association policy on the staffing of schools are implied in Policy Statement 5.20 (Alberta School Trustees Association, 1974:26) which contends that the association should:

> Take the position that school boards must be able to employ such staff as are needed under such conditions of employment as are necessary for the achievement of their educational goals.

The association gives some support to differentiated staffing and the use of non-certificated personnel in Policy Statements 9.04 and 9.041 (Alberta School Trustees Association, 1974:31) which direct that the association shall:

> 9.04 Advocate that some instructional services (teaching-related activities) may be provided by persons who hold various kinds of qualifications and that some of these persons may not be certified teachers.
>
> 9.041 Support the concept of differentiated staffing in order that

non-certificated personnel be allocated to work under the general direction of the principal or other certified teacher so as to improve and expand programs and services.

Letters of Authority. Policy Statement 9.20 (Alberta School Trustees Association, 1974:32) supports the issuance of Letters of Authority to qualified persons. This policy statement directs that the association shall:

> Urge the government to grant temporary authority to a person holding a degree acceptable to the Minister, to instruct in his specialization, but who has no formal teacher education, such authority to be granted in those cases where a certified teacher could not be engaged.

Training in development and use of school aides. Support for the training of teachers in the development and use of school aides is contained in the following statement of policy adopted by the association in 1975:

> BE IT RESOLVED, that the Alberta School Trustees Association urge member boards to adopt professional development policies and programs that would provide training in the development and use of school aides.

There would appear to be no specific policy presently adopted by the Alberta School Trustees Association on the organization of schools to accommodate differentiated staffing patterns, although Policy Statement 5.20 (Alberta School Trustees Association, 1974:26) states that:

> . . . school boards must be able to employ such staff as are needed under such conditions as are necessary for the achievement of their educational goals.

PERCEPTIONS OF SENIOR STAFF OFFICERS

Group interviews were held with six officers of the Department of Education, four officers of the Alberta School Trustees Association and two officers of the Alberta Teachers' Association. In all cases the personnel interviewed were senior staff officers of their organizations and the interviews lasted from between an hour and a half and two hours. These interviews focussed on the perceptions that these officers held of the current stance of their organization towards differentiated staffing practices in the province and their perceptions of likely trends and desirable future developments. The interviews identified a number of general areas of concern as perceived from the different perspectives of each organization as well as a number of specific contemporary problems.

Differentiation of Professional Staff Roles

Staff officers of the Department of Education did not perceive differentiation of professional staff roles to be an issue or a problem in Alberta at this time.

The officers of the Alberta Teachers' Association (A.T.A.) indicated that present policy would not prevent differentiation of professional functions for certificated personnel. They perceived that differentiation by salary would not be a concern providing additional salary is associated with additional responsibility. However, it was pointed out that hierarchical arrangements implied in some models of differentiation are at variance with the thoughts expressed in a position paper (Alberta Teachers' Association, 1975:179) dealing with the nature of the teaching profession:

> The model of the bureaucratic employee working within a framework of rules and specifications and in a hierarchical chain of command does not fit the requirements for the provision of high quality teaching in Alberta schools. Alberta teachers must lead in developing a collegial model . . .

As previously noted, however, Current Specific Policy 5.A.6 of the A.T.A. opposes the implementation of "merit rating for salary purposes."

Staff officers of the Alberta School Trustees Association (A.S.T.A.) stated that their organization has no explicit policy on the differentiation of role for *professional* staff. These officers indicated that A.S.T.A. support for an increasing number of positions of responsibility has been demonstrated in collective agreements, and that salary allowances for positions of responsibility and release time have been negotiated for a variety of positions.

Use of Non-Certificated Personnel

The Department of Education officers interviewed stated that their organization has not found it necessary to take a position related to the use of non-certificated personnel in schools since the Alberta Teachers' Association has utilized court action against several school boards on this matter. The Department, it was reported, has available several methods of varying degrees of formality for investigating alleged misuse of aides should the need arise.

A.T.A. Current Specific Policy 14.A.2 recognizes that non-certificated personnel may become involved in the instruction process. However, the A.T.A. staff officers indicated some practices would clearly fall outside association policy. For example, it was noted that it would not be acceptable for a teacher to establish a practice of having an aide instruct on a regular basis while the teacher was present largely for the purposes of discipline and control. The A.T.A. position paper on teacher aides (Alberta Teachers' Association, 1975:18-19) elaborates:

> Teachers cannot ethically neglect their responsibilities for diagnosis, prescription, implementation and evaluation . . . Failure to recognize the continuance of teacher responsibility could be the source of charges of unprofessional conduct against teachers. [However] . . . an aide might at times perform a demonstration role, comment on slides, or talk to students about some topic in which the aide has special knowledge. That is, the aide might at times take a role in the instructional component of education. But the aide would do so under the direction of the teacher in the same way as a teacher brings in a guest speaker from the community. The aide would not diagnose, prescribe or evaluate with regard to the students.

One staff officer provided the illustration of a paid aide with high academic qualifications in biology providing classroom instruction for one unit in an area of his expertise. It was stressed, however, that the teacher must retain responsibility for the key task areas, as described in the position paper.

The A.T.A. officers indicated that there may be difficulties in operationalizing some association policies. A staff officer suggested two interrelated reasons:

1. The teaching function has not been precisely defined; and

2. Teachers frequently perceive aides, not so much as a threat to job security, but as a threat to job status—"teachers' aides have threatened the mystique of the profession."

The staff officers interviewed further indicated that, in implementing association policies, the A.T.A. would defend any teacher who refused, on reasonable grounds, the services of an aide. Furthermore, the A.T.A. would support the view that teachers should also be responsible for evaluation of aides.

During the A.T.A. interview, it was noted that aides have traditionally been hired to supplement existing teaching staff, and that the practice of replacing a teacher with one or more aides in schools in some jurisdictions in Alberta may generate concerns which relate to policy statements 10.A.16, 14.A.3, and Directive for Action 14.B.2 (Alberta Teachers' Association, 1975:160-162). Staff officers interviewed indicated that concerns in these areas have been expressed on occasion during collective bargaining with school boards.

The A.T.A. officers suggested that the present university training programs for teachers could be augmented to provide instruction in the use of aides. This proposal received support from both the Department of Education and the A.S.T.A. officials. In particular, the Department officers perceived that teachers require time to adjust to working closely with other adults and that teacher preservice and inservice programs did not appear to equip teachers with skills for managing and supervising subordinates and auxiliary staff.

Staff officers of the Alberta School Trustees Association stressed that, to the best of their recollection, no differentiated staffing practices in Alberta had been *initiated* by school trustees, and that various staffing patterns have been adopted as a result of recommendations from school system administrators which were made on the basis of perceived educational need.

Department officers also stressed the extent to which local arrangements between boards and teaching staff were cooperatively developed and implemented, often providing models for others to copy or adopt.

Current Concerns

A number of specific concerns emerged as a result of group interviews.

Letters of Authority. A small increase in the annual number of Letters of Authority was acknowledged by the Department of Education staff officers. However, this increase is seen as being largely a result of special circumstances associated with the development of new programs and changes in regulations not related to concerns with regular classroom staffing practices. Specific areas involved include:

1. Early Childhood Services;
2. changes in regulations concerning certification for persons who met the academic qualifications but who are not Canadian citizens or British subjects; and
3. the assumption of responsibility for several private schools by school boards, some of which provided education for handicapped children.

The A.S.T.A. officers also noted the increasing use of Letters of Authority in recent years, especially to meet the needs of rural boards. The perception of the officers interviewed was that the A.S.T.A. has supported this trend, but perceives opposition coming from the A.T.A.

The A.S.T.A. officers also noted five additional specific concerns relating to staffing practices that have appeared in recent years:

1. employment of band instructors who are not certificated teachers;
2. use of community personnel in the junior high school option program;
3. problems experienced by rural boards in hiring certificated instructors for industrial arts programs;
4. supervision provided in Work Experience Programs and Special Projects; and

5. use of non-certificated personnel for instruction in the French and Cree languages.

The Department officers also identified some of these specific topics as well as some additional concerns.

Band instructors. The Department, it was stated, has rejected using Letters of Authority for band instructors. It was perceived that the position taken by school boards that these persons are aides responsible to the principal, especially if the school time-table shows the principal's time assigned to this task as a period of instruction, is considered viable. However, it was suggested that definitive interpretation can only result from a court decision.

Student volunteers. The staff officers of the Department perceived that the Department of Education maintains firm controls over the course credit requirements for Work Experience Programs and Special Projects. The work performed by students must have an educational component and may not consist of only routine clerical tasks of the kind carried out by some teacher aides.

Special education. During the interview with Department officers, the Director of Special Education indicated a distinction often made in his branch between therapy and teaching. The former is frequently used to describe work with a student on a one-to-one basis, whereas work on a one-to-many basis is considered teaching. He indicated that proposals for funding formal and required inclusion of teacher aides for special education have been rejected. It was noted that school boards have the discretion to employ aides as an addition to exiting staff.

Instruction in the French language. The Department officers interviewed indicated that Section 150 of *The School Act* provides for persons who may be non-certificated to provide instruction in the French language under certain circumstances. This Section states:

> 150(3) Notwithstanding Section 73, a board, subject to the regulations of the Minister, may employ one or more competent persons to give instruction in French or any other language to all pupils whose parents have signified a willingness that they should receive it.

The interviewed officers reported that a legal test has supported this provision.

Other practices. Two long-standing programs which involve distinctive instructional practices were discussed during the interview with Department officers. Course credit has been available for many years for private instruction in music by persons who may not hold an Alberta teacher's certificate. There has also been use of non-certificated personnel to provide supervision for pupils under instruction by teachers of the Correspondance School Branch. The officers interviewed were of the opinion that the Department has taken the position that supervisors and pupils work under the direction of certificated teachers. These officers were aware of

no concerns having been expressed in respect to either of these practices.

Certification of aides. Little pressure was perceived by the Department officers for formal provincial certification of teacher aides. This was partially attributed to the current absence of union organization of aides. Request for a provincial certificate in addition to college awards was acknowledge, especially from graduates of teacher aide programs at Grant MacEwan and Red Deer Colleges. Several merits of certification were noted, especially from the point of view of employers who desire credentials from job applicants. The view was expressed that provincial certification may be accompanied by a stronger move toward unionization.

An interview with the legal counsel to the A.S.T.A. indicated that school boards have been involved in negotiations on the issue of membership for teacher aides in the Canadian Union of Public Employees. The position taken by the A.S.T.A. in these negotiations has been one of opposition to unionization.

The A.T.A. staff officers interviewed considered it unlikely that teacher aides would be considered eligible for associate membership in their organization, it being seen desirable for aides to organize their own collective efforts.

Present Trends and Desirable Future Developments from the Perspective of the Alberta Teachers' Association

The A.T.A. staff officers interviewed identified several trends in the use of school staff in Alberta and speculated on likely outcomes. Their views on desirable future developments were also offered. These perceptions and opinions are set out below.

Use of paraprofessionals. The A.T.A. staff officers reported that their organization is experiencing some pressure from members on the use of teacher aides. Concerns that have been expressed by telephone calls from members and communication from local associations involve perceived abuse of A.T.A. policy and perceived threats to job security. In many instances, adult volunteers are the subject of concern.

In the opinion of these A.T.A. officers, there would appear to be concern that increased use of aides in a time of financial constraint may be seen by school boards as providing a solution for staffing problems, but may be seen by teachers as a threat, particularly at a time when there is no shortage of teachers. For these reasons, it was considered that expanded use of teacher aides should be considered only when the resources of a school system would permit this. It was observed that the use of funds for these purposes is low on the list of educational priorities, as far as the A.T.A. is concerned, and is likely to remain so in the forseeable future. Staff officers agreed that any attempt at unilateral implementation of such practices in Alberta would fail.

Training and certification of aides. The A.T.A. has participated in decisions related to the course content of teacher aide programs at Red Deer College and Grant MacEwan College. Staff officers indicated that the A.T.A. had no desire to be prescriptive or to see standarization but would endeavour to ensure that programs were consistent with A.T.A. policy.

These officers were of the opinion that their organization would be concerned if advanced standing in undergraduate education programs were offered on the basis of courses completed in the programs at the above institutions. It was indicated that experience as a teacher aide should not be perceived as a stepping stone to teaching.

The officers felt that the government should not be involved in the certification of aides. The A.T.A. position, consistent with policy stated previously, is that the teachers concerned should make the decisions on the type and qualifications of aides to be employed in the classroom.

Specification of duties. Current Specific Policy 14.A.3(2) indicates that the A.T.A. does not advocate the specification of duties and functions of teacher aides by statute or Departmental regulation. Staff officers suggested that the development of career patterns for aides may contribute to a change in this position. Such patterns may lead to pressures for expanded roles for aides which would necessitate a more careful delineation of duties.

Unionization of aides. The officers interviewed reported that several specialist councils of the A.T.A. have provided inservice programs for teacher aides. However, given the present nature of the A.T.A., it is considered unlikely that teacher aides would ever be considered eligible for associate membership.

Differentiation of professional staff. No major trends toward increased differentiation of professional staff roles were perceived by the A.T.A. officers interviewed, despite several innovative staffing practices in specific schools such as Bishop Carroll in Calgary. Financial constraints were seen as a limiting factor in the provincial context. Designation of positions such as "master teacher" in Alberta jurisdictions was not considered likely.

Trends Perceived by Alberta School Trustees Association Officers

A.S.T.A. staff officers observed that trends in differentiated staffing in Alberta were more a product of the adoption by a school or school jurisdiction of a particular kind of school organization, method of instruction or philosophy, rather than an attempt to establish a staffing pattern for its own sake. Similarly, the officers were of the opinion that some of the problems which have been experienced arise not only because of difficulties associated with the definition of teaching as previously mentioned, but also as a result of departure from the traditional classroom unit in an increasing number of instances. As an example, the

pupil-teacher ratio was cited as having quite different connotations for large-scale team-teaching projects than for traditional classroom organization. Staff officers perceived that conflict over pupil-teacher ratios may be the source of problems in future.

Decentralized school budgeting. Participants in the A.S.T.A. interview noted that differentiated staffing practices have been associated in some jurisdictions with the introduction of a system of school-based budgeting. Two examples were given: Lethbridge Public School District and Calgary Roman Catholic Separate School District. These two jursidictions were described as having adopted a budget policy which permits the school to make a decision to exchange a teacher for a specified number of teacher aides. The A.T.A. staff officers suggested that while the implementation of such a policy may be consistent with A.T.A. policy regarding school-based decisions on the employment of aides, the possibility exists of conflict with other A.T.A. policy which opposes the employment of aides if this may effect a reduction of certificated staff. A.S.T.A. staff officers noted that the Lethbridge School District is currently reassessing the practice of decentralized budgeting.

A second budget practice was also considered as being related to differentiation of professional roles. Red Deer Public School District was used as an example, for, as part of its decentralized school budgeting program, this jurisdiction provides schools with a lump-sum "responsibilities allowance" to be distributed at the discretion of the school.

Future Developments as Perceived by A.S.T.A. Officers

The A.S.T.A. staff officers interviewed considered that:

1. A definition of teaching will probably be given by the courts. While this development is not seen by the A.S.T.A. officers as desirable from the perspective of their association, it is seen as being probably the only possible way of treating the problem.

2. The present incremental approach to the adoption of different staffing practices will probably be maintained. This was seen by the A.S.T.A. officers as desirable from the viewpoint of their organization.

3. Alberta trustees will probably respond favourably to initiatives which propose different patterns of staffing. It was also considered likely that rigid insistence on the requirements of teacher certification for all teaching-related activities will probably not meet with trustee support. These observations were based on the belief that trustees generally have a high regard for the judgement of professional educators and for the contribution that a wide range of personnel can make to instruction.

4. Certification of teacher aides would not be desirable from the perspective of the A.S.T.A. The view was expressed that certification may add to the costs of education.

5. Professional development programs should be established to foster the skills and attitudes necessary to manage the changes associated with the adoption of different patterns of staffing.

Trends and Future Developments as Perceived by Department of Education Officers

Three general areas of concern which might influence the rate at which different staffing practices were adopted in Alberta were identified by the staff officers interviewed.

1. The protective stance of the A.T.A. One aspect which appears critical to the interests of teachers from the perspective of the Department of Education officers interviewed, is the teacher-pupil ratio. It was noted that this concept has changed with the trend away from the conventional classroom instructional unit. The view was expressed that teachers' support for increased uses of aides would have to be preceded by the establishment of an acceptable *professional* teacher-pupil ratio.

The possibility was also raised that the views of individual members of the A.T.A. may at times be at variance with the official stance of the association. This difference may exist, for example, when the A.T.A. initiates investigative action in respect to a non-certificated person who is perceived locally to be meeting a critical need.

2. Financial constraints. Staff officers of the Department of Education suggested that school boards will limit the extent to which teacher aides can be hired to complement existing staff. One staff officer expressed the view that there may be board interest in staffing practices which involve the hiring of aides as an alternative to hiring teachers because of the opportunity provided to keep costs down. The availability of funds from programs such as the Educational Opportunities Fund (EOF) was seen by officers interviewed as continuing to have an impact on the hiring of aides by making additional funds available for improvement of classroom instruction.

3. The nature and extent of further development. Staff officers anticipated that further developments would be incremental in nature, largely as a result of the factors identified above. Support was given to the view that board actions in respect to different staffing practices are generally a response to the recommendations and initiatives of professional educators. No major program or thrust on a provincial scale by the Department of Education was anticipated in the near future.

QUESTIONNAIRE RESPONSES

The staff officers of the Department of Education, the A.T.A. and the A.S.T.A. who participated in the interviews were requested to complete a short questionnaire in order to obtain *their perceptions* of

the prevailing attitudes of the *members* of their organizations toward a number of statements. Returns were obtained from the two A.T.A. officers, the three A.S.T.A. officers, and five of the six Department officers. Information from the A.T.A. returns is not provided in this section due to the difficulty of generalizing from two returns, and due to the fact that the A.T.A. has a well developed body of policies that provide a good indication of the association position on the questions asked.

1. Both Department and A.S.T.A. respondents generally agreed that the members of their organizations would tend to agree that:

   i. the quality of instruction of most schools could be improved by utilizing different staffing patterns;

   ii. alternative staffing patterns should provide a better match between salaries and responsibilities; and

   iii. the assignment of non-certified personnel of non-instructional tasks traditionally expected of teachers would make better use of scarce funds.

2. Department and A.S.T.A. respondents also indicated that the members of their organizations would participate in the implementation of alternate staffing patterns.

3. The A.S.T.A. respondents indicated that their members would generally agree, and the Department respondents indicated that their members would strongly agree that:

   i. there should be a way to staff schools so that good teachers can assist others in improving their teaching skills;

   ii. schools should have a better way of directly linking teacher skills to instructional responsibilities; and

   iii. the effectiveness of teachers could be improved by assigning some of their present tasks to non-certificated personnel.

4. In response to a number of questions asking for the staff officers' perceptions of the attitudes of the members of their organizations towards increased responsibility and discretion for teachers and administrators in several decision-making areas, Department and A.S.T.A. respondents provided the following replies:

   i. Two of the three A.S.T.A. officers indicated strong support to the view that these personnel should have more responsibility and discretion in decisions related to curriculum, teaching methods, school rules and regulations, and school budgeting. Only one A.S.T.A. officer indicated strong support for more school-based

responsibility and discretion for school staffing.

ii. Department respondents indicated moderate support to the view that teachers and administrators should have more discretion and responsibility for curriculum, teaching methods, school rules and regulations, school budgeting and school staffing decisions.

It is noteworthy in this connection that current Specific Policy 10.A.2 of the A.T.A. advocates the development of staff organization which will "facilitate increased participation by teachers in decision-making with respect to such items as curriculum development, school organization, school district organization, staffing and school plant and facilities."

5. Respondents were also asked which of six different types of specialized staff they believed *members of their organizations* would like to see added to the complement of educational personnel in the province.

i. There was a unanimous response from the A.S.T.A. officials that members of their organization would most prefer the addition of teacher interns and would least prefer the addition of master teachers. Support for the other alternatives was equally divided.

ii. Responses from the Department officers indicated that the addition of teacher interns would be preferred more strongly by members of the Department, while master teachers and more clerical aides would be preferred least. Preferences for the other categories were unclear.

6. In response to a question which asked for the activities of preparing instructional materials, setting up/cleaning up, and planning for instruction, to be ranked according to the amount of time paid, volunteer and student aides should spend on these activities, these reactions were given:

i. The Department officers generally indicated that they believed members of their organization would prefer the most time to be spent assisting and supervising students, while least or no time at all should be devoted to planning for instruction.

ii. One Department official saw as top priority for volunteer and student aides the task of listening and reading to students.

GENERAL OBSERVATIONS

The information presented in this chapter tends to indicate that the three major provincial organizations have adopted an essentially conservative attitude towards differentiated staffing practices and would tend to favor an incremental approach to future policy development in this area. While on one hand none of the three organizations appear to be opposed to the development of differentiated staffing, none appear anxious to actively promote this practice. All three organizations appear to agree there should be no major moves at the provincial level to define the duties of, develop a scheme for, or encourage the unionization of paraprofessionals. While the A.T.A. adopts the position that paraprofessional employment and use should be subject to teacher perceptions of their needs, the A.S.T.A. advocates that school boards should be allowed to exercise their prerogatives for staffing and the Department appears content to administer existing legislation and monitor developments. This apparent desire to maintain the *status quo*, from the perspectives of the three organizations, is entirely consistent with their mandated and expected roles, and has created a favourable climate in which local schools and school boards could develop, and to some degree experiment with, innovative staffing practices as they perceived these to be necessary and feasible.

Nevertheless, three areas of potential concern can be identified: (1) the growing need for a clear understanding of what constitutes "teaching," (2) the potential impact of organized labor, and (3) the diversity of local needs. Although these three general concerns are interrelated in many ways, they will be discussed in turn.

Teaching and Non-Teaching

From a provincial viewpoint there would appear to be only two categories of staff employed in Alberta schools: teachers and non-teachers. Presently the distinction between the two classes is essentially pragmatic—teachers being certified according to a provincial standard, and non-teachers not. Certification provides the only universally accepted definition of a teacher in Alberta.

Presently there are only minor differences between the types of teaching certificates issued in Alberta. Thus, there does not appear to exist substantial grounds for differentiation of teaching duties on the basis of certificates issued. However, Letters of Authority and Interim Certificates may provide some basis for the future development of a designation or designations somewhat equivalent to "Intern Teacher"—a category of school staff which Department and A.S.T.A. officials perceived as a possible useful addition to the teaching complement in Alberta. In passing it may be noted that A.S.T.A. and Department support for the issuance of Letters of Authority to meet extraordinary needs indicates the continuing usefulness of this mechanism.

Excluding necessary maintenance and support staff, the non-teacher personnel in Alberta are generally subsumed under the title of paraprofessionals. While a number of paraprofessionals certainly are involved in classroom activities, the policies of the A.T.A. and the statutes administrated by the Department prohibit the use of these employees in a teaching role. However, from the provincial viewpoint there is confusion as to what constitutes teaching activity. Some definitions of teaching are available. The A.T.A. policies quoted that define the responsibilities of teachers and the behaviors given for E.C.S. teachers as quoted from the *Operational Plans for Early Childhood Services*, provide examples. Nevertheless, these definitions are limited to particular organizations or documents and no evidence was found of a collective move at the provincial level to establish a consensus definition. The general indication would appear to be that this task will fall to the courts. The Department officers interviewed indicated that their organization was aware of the difficulty of establishing an appropriate definition of teaching at the time *The School Act* was revised but was disinclined to include such a definition, thus, it was stated, leaving matters of interpretation to the courts should the need arise. It would appear quite likely that the need will arise in the near future as Section 168 of *The School Act* provides for legal penalties upon conviction of non-certificated persons who teach and for boards who knowingly employ non-teachers in a teaching role. Given confusion at the local level as to what constitutes teaching and the unilateral definition available to teachers in A.T.A. policy, Section 168 may be invoked to gain a legal definition of teaching.

The uncertainty encountered in distinguishing between teaching and non-teaching activities is compounded by the confusion over employee-student ratios and job designations. Local and partisan definition and use of such terms as teacher-pupil ratio, adult-pupil ratio, professional-pupil ratio and teacher aide, teachers' aide, classroom aide, instructional aide and others do not foster clarity.

In these areas of uncertainty the substantial body of policy statements articulated by the A.T.A. in the protection of member interests may well, in lieu of other well established policies, form one of the bases for future court decisions. However, the tendency towards contradiction evident in several of these policies may militate against such a development.

Unionization

There would appear to be little prospect of paraprofessionals being accorded status in the A.T.A. although this organization may welcome the unionization of these personnel by some other agency. Given the absence of a provincial organization singularly concerned with the needs of paraprofessionals, the task of unionization will probably fall to the Canadian Union of Public Employees (CUPE) and/or possibly the Civil Service Association of Alberta.

Unionization of aides, even on a local basis, will probably lead to a number of clearly articulated job descriptions—which will probably

provide an additional perspective on the definition of teaching—and introduce some codification to the available role designations and almost certainly increase the cost of paraprofessionals. Similarly, an additional stimulus for the development of certification standards for paraprofessionals may be provided as part of the overall rationalization of the employment and deployment of paraprofessionals provided by unionization. Probable net effects will be to (1) complicate local board negotiations and administration, (2) effect a possible reduction of non-teachers employed and (3) introduce a provincial organization to the educational field whose prime mandate may not be to further or enhance the quality of education in Alberta. It is also possible the unionization will prevent, or at least limit, the use of volunteer aides, a category of paraprofessional that is to some degree encouraged in Early Childhood Services programs, but which would appear to be providing some of the current concern of teachers regarding the use of paraprofessionals. Not unexpectedly, the A.S.T.A. appears to be opposed to the unionization of paraprofessionals. However, given the provision of the *Alberta Labour Act* and the demonstrated aggressiveness of both CUPE and CSA, unionization of paraprofessionals will probably escalate.

Local Needs

The question was raised by Department officials as to whether the policies of the A.T.A. can consistently be in accord with the needs of local teachers. While this may be a moot point the provisions of the *Teaching Profession Act* accord disciplinary powers to the A.T.A. which can be used to maintain member solidarity. Furthermore, the A.T.A. executive supervises local association and member representation to the government, thus facilitating solidarity of representation. However, a major concern is evident in the relationship of all three organizations to local boards, schools and communities. While these three provincial level organizations are well equipped to respond to local needs, those needs may develop along diverging lines, and may eventually present conflicting values, needs and demands. In essence, there would appear to be a major question as to whether the basically conservative attitude presently displayed by the provincial organizations can be maintained if local developments become increasingly innovative and diverse.

CHAPTER 6

OBSERVATIONS AND INTERVIEWS IN TEN SELECTED SCHOOLS

In order to obtain information about staffing practices used in schools in Alberta, the original research design specified that ten schools having a high degree of "differentiated staffing" would be described in detail. However, the superintendents' returns showed that the "pure type of differentiated staffing" discussed in the literature, which involves master teachers and considerable differentiation by function, did not exist in Alberta. Consequently, agreement was reached with the Technical Committee that ten schools using staffing practices which were considerably different from those commonly employed could be examined and described. This examination and description was to focus upon these different aspects of the utilization of employed and/or volunteer staff. In addition, opinions of staff were to be sought concerning their preferred staffing practices.

DATA COLLECTION

Pilot Study

A detailed examination was made of Westbrook Elementary School (Edmonton Public School District) to provide information about (1) which data should and could be collected and (2) the best methods by which these data could be obtained. Based partly upon this experience and partly upon information presented by L. Johnson and R. W. Faunce in "Teacher Aides: A Developing Role" (Elementary School Journal, December, 1973, pp. 136-144), certain general interview schedules and questionnaires were developed for

use with the following groups:

(1) principals;
(2) other educators;
(3) paid paraprofessional staff;
(4) adult volunteers; and
(5) student volunteers.

The researchers in each school were expected to modify these instruments as they saw fit for the particular conditions they encountered. In order to obtain some measure of time spent on various activities, or the extent to which use of a new staffing practice had altered time previously spent on these activities, the terms "Considerable," "Some," "Little" and "None" were commonly used in preference to percentages.

Main Study

The ten schools were selected after detailed information had been received about staffing practices in nineteen schools. This information was provided from the superintendents' questionnaires, and from telephone and face-to-face conversations with superintendents, other central office staff, principals and other educators having knowledge about particular schools. An attempt was made to achieve some balance in selection of schools among (1) urban and rural, (2) grade level, (3) type of jurisdiction, and (4) type of school. The following were selected:

K - Grade 8	Calling Lake, Northland School Division
K - Grade 6	Sir Alexander Mackenzie, St. Albert Protestant School District
	Thorncliffe, Edmonton Public School District
	Westbrook, Edmonton Public School District
Grades 7-9	Bishop Kidd, Calgary Roman Catholic Separate School District
Grades 10-12	M. E. LaZerte, Edmonton Public School District
	Winston Churchill, Lethbridge Public School District
K - Grade 12	St. Mary's, Calgary Roman Catholic Separate School District
Grades 1-12	Strathcona-Tweedsmuir Private School
Special School	The Activity Centre, Edmonton

These schools were selected mainly because they had the following staffing and program characteristics in varying degrees:

(1) Bishop Kidd (Grade 7-9) — paid teacher aides and student aides; organization of professional and paraprofessional staff into three learning-area teams; individualized and small-group instruction; teacher-advisors.

(2) Calling Lake (K-Grade 8) — Indian teaching and counsellor aides; kindergarten teaching assistant.

(3) M. E. LaZerte (Grade 10-12) — governance of school by an internal representative school council and committees; community orientation; flexibility in use of teaching teams and learning areas.

(4) Sir Alexander Mackenzie (K-Grade 6) — school aides; parent volunteers; cross-age tutoring.

(5) The Activity Centre — low ratio of adults to children, and a high ratio of support staff to teachers.

(6) St. Mary's (K-Grade 12) — three "schools"-in-one; departmentalized staff; teacher advisors; community-orientation; specialist services; teacher aides; cross-age tutoring; volunteer aides; police resource officer.

(7) Strathcona-Tweedsmuir — private school; teacher-advisors; academic orientation; career advancement within school and merit factor in staff salaries; cross-age tutoring; use of external specialists; extra-curricular activities; parental involvement.

(8) Thorncliffe (K-Grade 6) — kindergarten aides; teacher aides; parent volunteers; research projects.

(9) Westbrook (K-Grade 6) — kindergarten aide; teacher aide; full-time librarian; parent volunteers.

(10) Winston Churchill (Grade 10-12) — individualized and small-group instruction; teacher-advisors; learning centres; teacher aides; employed student aides.

Permission to gather information and to interview teachers was obtained from the principals and where appropriate also from the superintendent's office. For The Activity Centre, permission was obtained from the supervisor and chairman of the governing body. In every case, excellent cooperation was obtained. Staff and research assistants spent varying amounts of time in each school in conducting interviews, collecting school data and observing activities. This in-school period was usually at least six person-days. In order to minimize interference with normal school routine, a good deal of information was often obtained in advance through the mail and from questionnaires completed by staff during their own time.

From these data individual descriptions of practices in the ten schools were written. These descriptions, which follow, have been verified by the principal of each school and approved by the superintendents.

THE ACTIVITY CENTRE

(A school for handicapped children)

The Setting

The geographical location of The Activity Centre in the downtown area of Edmonton enhances its ability to serve the needs of potential clients within the corporate limits. To be eligible for the centre, children must be developmentally handicapped and/or physically handicapped and not possess the necessary skills (e.g. toilet training) required for admission to other institutions such as the Robin Hood School or the Winnifred Stewart School.

The main floor of the building is occupied by the Alberta Association for the Hearing Handicapped, with The Activity Centre being on the lower level. The floor plan (Figure 6.1) indicates the utilization of the available space which amounts to approximately 2,000 square feet. Figure 6.1 also illustrates the area outside the building that is available for outdoor activities.

Description of Staffing Practices

Licensed for 25 exceptional children between the ages of three and sixteen years, the school operates on a year-round basis from 9:00 a.m. to 4:00 p.m. The hours of the children's attendance at the school are governed by the handibus, so the school day is from 10:00 a.m. to 2:30 p.m. The regular school year is observed and two instructional personnel from the Edmonton Public School District are deployed at the school from September to the end of June. A summer program (July-August) offers a daily activity and parent relief program for those dependent handicapped children who by the nature of the complexity of their handicap are excluded from other recreational summer programs.

The Alberta Association for the Dependent Handicapped (AADH brochure) has defined the dependent handicapped as the following:

> Those who are mentally and/or physically handicapped to such a degree that they are likely to be dependent, in a large part, on others for the rest of their lives for all basic living help.
>
> The reasons for dependency include:
>
> Brain damage, cerebral palsy, epilepsy, blindness, deafness, lack of ability to walk or move, lack of language or very limited communication skills, mental retardation and for some, multiple combinations of these and other handicaps . . . all are characterized as "functionally retarded."

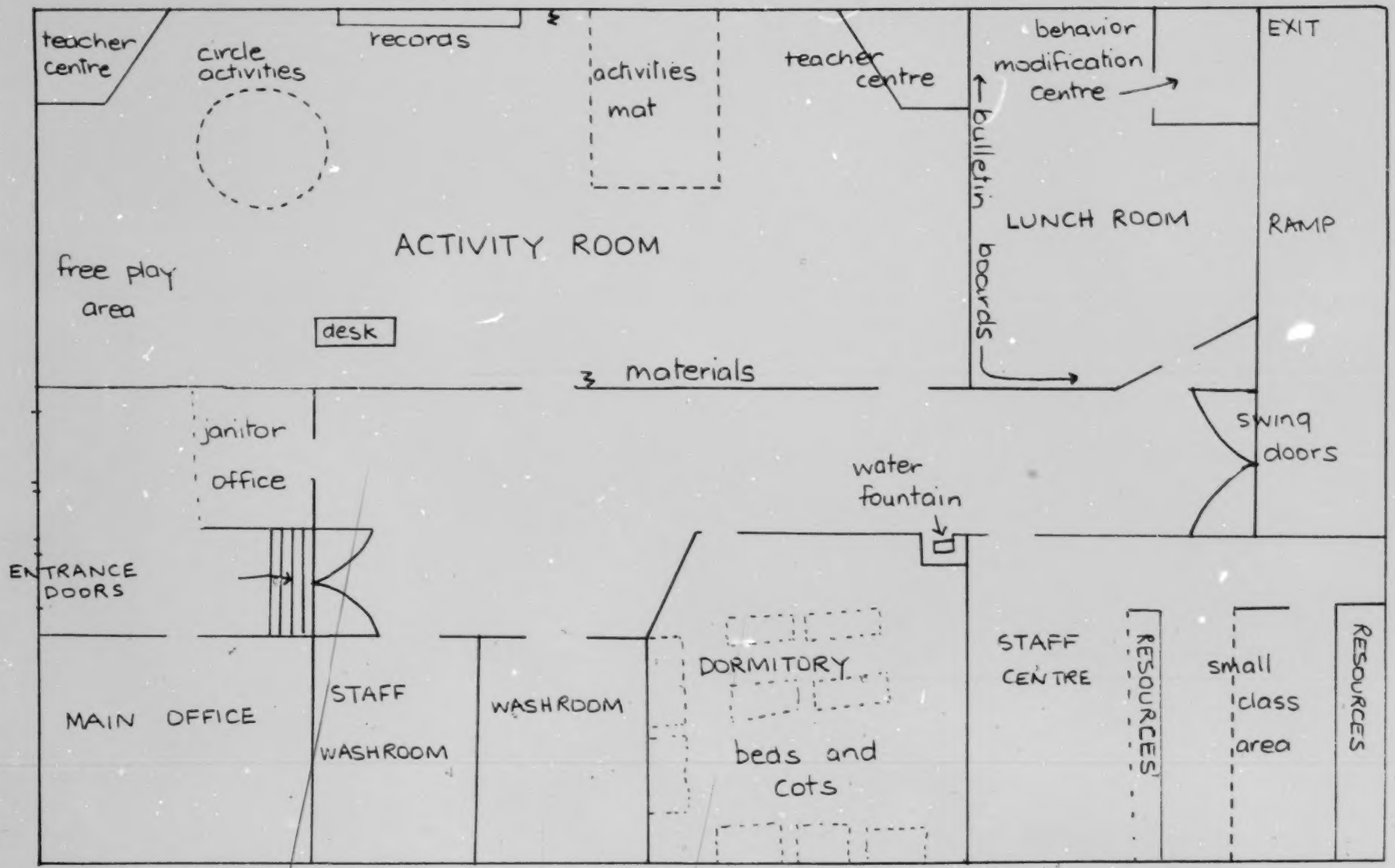

Figure 6.1

Floor Plan of The Activity Centre

Children who would otherwise qualify for admission but who require extensive medical attention on a day-to-day basis can be placed in a residential centre where such attention is available to them. However, immediate placement is not likely as accommodation is limited and the waiting list has nine names.

At present, the school is operating at maximum capacity with 25 children aged 4-16 years. Seventeen of the children are seven years of age or younger, while eight are eight years of age or older. The average age is seven years. Of the children currently enrolled, 13 are male and 12 are female. Many of the children are multi-handicapped, with only ten being independently mobile.

Paid personnel. The paid staff of the school consists of five professionals and eleven paraprofessionals. The professional staff consist of one full-time supervisor, two full-time teachers, one part-time nurse and one part-time physiotherapist. Eight full-time and two part-time child-care workers together with a part-time secretary make up the paraprofessional staff. All paid employees at the school are female.

Funding from more than one agency has resulted in an organizational structure which is necessarily more complex than that of institutions which obtain their funding from a single source. (See Figure 6.2.)

The two teachers who are responsible for the educational program at the school are accountable not to the Supervisor of the school but to the Principal of the Edmonton Public School Districts' organization which caters for the needs of exceptional children. The Supervisor, whose jurisdiction covers all other staff at the school, is accountable for all aspects of the program other than the educational component to the Management Committee of the AADH. The Association, in turn, is accountable to both the Department of Social Services and Community Health and the Department of Education.

In this setting, where the clients' handicaps may include mental retardation, brain damage, physical handicaps, epilepsy, autism, and visual and hearing impairments, the concern of the educational program is with the acquisition of very basic skills. Each child's individualized program emphasizes five areas of development: cognition, self-help, language, socialization and motor skills. Thus the program includes the development of non-verbal communication (e.g. eye contact, attention span) as well as the self-help skills of eating, dressing and personal hygiene.

The school day is divided into work modules which vary in length from 15-35 minutes with one hour for lunch. In addition to the fact that much of the program is dependent upon individualized instruction on a one-to-one basis, the physical needs of these exceptional children are such as to require constant supervision and attention. The implementation of the program places a heavy reliance on the cooperation of the child-care workers. In general, child-care workers have no

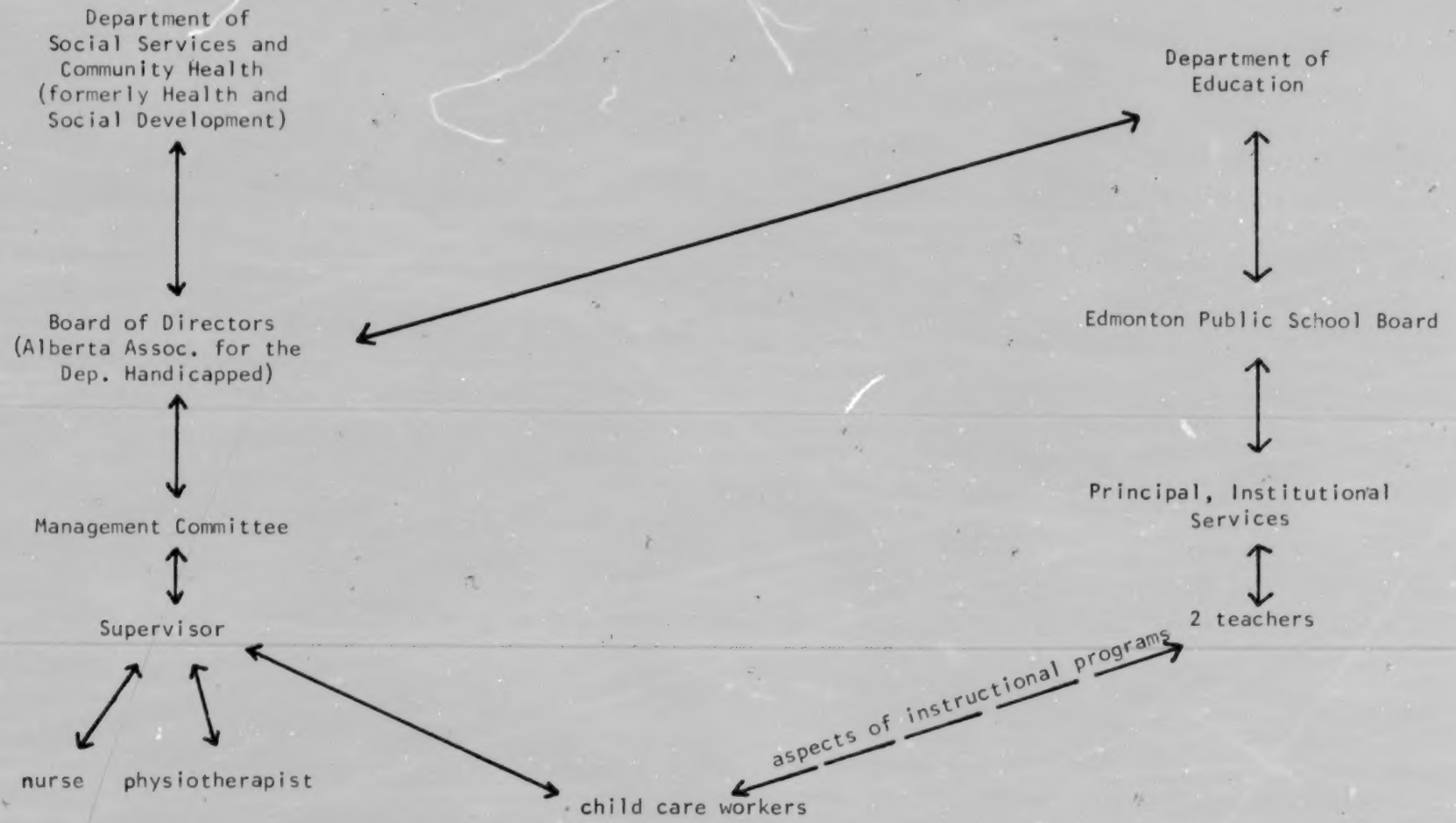

Figure 6.2

Patterns of Responsibilities of Individuals, Groups and Organizations

formal training either in education or mental retardation. Child-care workers receive their training at the centre with new personnel learning "on the job."

Volunteer personnel. The school makes use of a variety of volunteer help. Two university students from the Department of Rehabilitation Medicine, University of Alberta, assist at the school for two half-days a week for a semester as part of their practicum experience. Another university student in the Department of Psychology is currently involved with a bio-feedback experiment with one child. Twice a week, for half-hour periods at lunch-time, four Grade 6 students from a regular school visit on a rotating basis. These visits are of mutual benefit to both groups of students.

Volunteer involvement of parents has declined as more para-professionals have been added to the school's staff. The original request in January, 1973, for parents to volunteer one day a month to the clinic has now decreased to one day every two months. Clearly, such volunteer activity is not possible for all parents however willing they are to be involved, as some are working mothers and some single parent homes are involved. Fifteen parent volunteers are presently assisting at the school. For various reasons, this number of volunteers can fluctuate quite widely over a relatively short period of time. In addition to parent activities, all parents are strongly urged to visit the school once a month to observe the progress of their children.

A staff member from the Department of Psychology, University of Alberta, donates his services and acts as a consultant to the educational program.

Antecedents of Present Staffing Practices

Short-term programs, introduced in the summers of 1971 and 1972, were funded by a combination of federal (Opportunities for Youth) and provincial (Priority Employment Program) grants. The facilities of another school, located across the street, were utilized for these projects. The summer program not only demonstrated the benefits which accrued to the dependent handicapped and their immediate families from such programs, but confirmed the widely-perceived need for continuing programs on a year-round basis. In response to demonstrated need, the school began operation in January, 1973, with funding being supplied through the Department of Education and the Department of Social Services and Community Health. The enrollment in January, 1973, was seven children.

Facilities. The building was rented by the Special Education Branch of the Department of Education on behalf of the AADH. Built in the early 1950's, it originally housed a parish school which operated as a private school.

Since the school was not originally designed for handicapped, non-mobile children, renovations were necessary. Not all the renovations reached the standards of the current building codes (e.g. the ramp for wheelchairs is shorter than the recommended length) but in the absence of available alternative accommodation, the Homes and Institutions Licensing Branch, the City Health Inspector and the Fire Department agreed to permit the operation of the school in these facilities.

Funding. The joint departmental funding arrangements of the Department of Education and the Department of Social Services and Community Health was one of the first of its kind in Alberta. It allowed that an institution operating as a school was not completely under the auspices of the Department of Education. The number of support staff required in caring for exceptional children necessitated the complementary grants from the Department of Social Services and Community Health because the Department of Education did not provide sufficient funding.

Other sources of funding for the operation of the school are donations from the general public and members of the AADH and from minimal fees from parents whose children attend the school. Parents must belong to the AADH for which the annual fee is $3.00. In addition they are required to pay a $10.00 registration fee per school term and $5.00 for the summer program (July-August). Inability to pay on the part of the parents would not preclude their children's attendance, but cases of non-payment are rare.

Program. Before the school opened in January, 1973, an informal appeal was made to both city school boards to provide educational services for the children. At that time, neither board felt that such an undertaking was feasible. The AADH therefore felt that there was no alternative but to establish the school and operate the program.

During the school's initial period of operation, the role of supervisor was combined with that of educator and the educational component was emphasized. The first supervisor was a certificated Alberta teacher with an M.Ed. in Elementary Education, but this supervisor was unable to extend her original contract of three months. Although the second supervisor did not hold an Alberta teaching certificate, she did have formal teacher training and some experience with exceptional children.

Influences upon Present Staffing Practices

After the school had been in operation for approximately one year, the AADH formally approached both Edmonton school boards requesting provision of educational services. An agreement was reached with the Edmonton Public School Board in time for the 1974-75 school year when the school received the services of two certificated teachers employed by that board. From September 1974 onwards, the school continued to operate as a private organization in partnership with the Edmonton Public School Board.

These resulting changes in organizational structure were not received favorably by the child-care workers who had been at the school since its inception and who viewed the teachers as intruders who did not "understand" the needs of exceptional children. Both teachers at the school agreed that the period of adjustment for themselves and the child-care workers was a lengthy one.

The teachers, without the benefits of an orientation program, were placed in a situation where they were obliged to define their own instructional role. Disputes about role differentiation between professional educators and paraprofessionals in caring for clients consumed considerable time and energy. For a limited time, one teacher performed some tasks (e.g. feeding and toilet training) of the para-professionals. In time, the teachers' role was delimited by their Principal to instructional matters, but this did little to lessen the antagonism of some of the child-care workers. The role of instructional personnel was frequently misunderstood by child-care workers to whom the responsibilities of the teachers had not been fully explained. Their expectations for the teachers was not so much the implementation of the instructional program as it was the provision of "extra hands" to help care for the physical needs of the children. Few child-care workers were convinced of the need for two professional teachers to organize the educational program. They were convinced that they had lost some of their previous autonomy and that their role at the school was being downgraded.

Parents, on the other hand, welcomed the liasion with the school board and the employment of the two teachers. Most parents were pleased that their children were at last to be recognized as having a right to share in the educational tax dollar and were -- like "normal" children -- being placed under the care of professional educators.

The Management Committee did not concern itself directly with the role of the teachers or with the educational program. The responsibility for this educational component did not rest with the Management Committee after September, 1974. The Committee assumed the role of facilitator and, in general, directed its energies to the upkeep and general maintenance of the building, the appointment of supervisors and other related issues.

The complexity of the organizational jurisdictions was such that personnel problems proved difficult to resolve. Between January, 1973, and September, 1975, the school had six supervisors, three of whom had interim or temporary contracts. The turnover of supervisory personnel undoubtedly added to the problems of the school.

Outcomes

The role of the teachers in designing and overseeing the educational component is now accepted. In part, the changed climate must be attributed to the supervisor and teachers who have instituted a system of cooperative planning with the child-care workers and have worked to convince all concerned of the benefits of the present program.

Although the school day is scheduled to start at 10:00 a.m., the children begin to arrive at the school from 9:30 a.m., but all children might not be assembled until 10:15 a.m. or even later. Arrival is dependent on the handibus schedule, and for some children the ride may take an hour or more. All children bring a packed lunch.

A daily schedule has been established by the teachers. The following description of the time modules has been taken from the Educational Program of the school:

1. Morning Circle-- (Full group - 35 minutes)

   This activity involves the children in action songs, finger plays, and games which help develop increased attention span and eye contact, language, cognition, socialization, and fine and gross motor skills. Child-care workers, volunteers and teachers assist the children with the actions.

2. Free Play -- (Divided into mobile and immobile groups due to the unstructured situation -- staff coffee time - 20 minutes).

   During this time the children learn to interact with toys and to socialize and share without constant adult guidance. Many of the immobile children use the walkers, stand-up box, prone board, wedge, or corner support during this time.

3. Toilet Training -- (Specified times for the individual children depending on their needs).

   This program is implemented throughout the day and charts are kept to indicate any needed adaption in a child's program.

4. Work Time -- (One staff to one child -- one twenty-minute session in the morning and two twenty-minutes sessions in the afternoon. One teacher is available during the afternoon sessions for consultation).

   a) Muscular Movements - Each child has a specific large motor skills program. Direct consultation is given by the physiotherapist.

   b) Special Skills - A program involving cognitive, language, fine motor and self-help skills has been designed for each child.

   c) Both programs were based on the Portage Project Checklist, teacher-staff observation, and parental suggestions.

5. Lunch -- (Staff-student ratio is based on the degree of the child's handicap. - one hour).

   Most children have specific lunch-room objectives to be emphasized during the feeding time. Some of the skills included are use of a straw or spoon, chewing, and drinking from and/or holding a glass.

6. Quiet Time -- (30 minutes)

   This provides time for the children who need rest and/or social interaction with peers and/or staff.

7. Juice Time -- (5 - 10 minutes)

   This provides time for the children to drink more fluids and an additional practice time for using a straw and/or glass.

8. Closing Activity -- (Full group - 20 minutes)

   This time includes activities such as art, story telling, games, a walk outside, a special guest, or a sing-a-long.

The program is tailored to meet the individual needs of each handicapped child. A binder containing the individual program and a daily progress report is kept for each child. These binders are readily accessible both to staff and parents.

The following section headings included in each child's binder are explained by the teachers in the school's Educational Program:

1. Objectives -- Individualized objectives have been designed by the teachers through consultation with the Portage Developmental Checklist, the Physiotherapist, the child's parents, and key workers. Parents are sent a copy of their child's objectives. The objectives are updated monthly during the teacher key worker conferences.

   a) Priority Objectives -- These are very important objectives that need to be improved and/or completed before other objectives can be met. Examples are increased eye contact, longer attention span, and control of emotions. These objectives are stressed throughout each day both formally and spontaneously.

   b) Specific Objectives -- These are four or five objectives which are selected according to the child's developmental level in each of the five areas (cognition, self-help skills, language, motor skills, and

socialization). These objectives are included during Special Skills, Muscular Movements, Behavior Modification, Cubicle or Classroom Settings, or at other specified times throughout the day.

2. Special Handling Techniques -- New staff volunteers can refer to this section to determine what techniques are used in the areas of eating habits, special equipment aids, toilet training, and special discipline programs.

3. General Comments -- The staff who remain after school write particular comments relating to their charges' behavior throughout the day.

4. Parent-Teacher Conference Notes -- Information discussed during the formal parent-teacher conferences which should be related to staff, are included in this section.

5. Special Skills and Muscular Movements -- The child's current program and a comment sheet are included in each of these sections. Each skill included during a work session is evaluated using the following check system:

   ✓ completes skill by self 5 out of 5 times
   ✓ completes skill by self 1 - 4 out of 5 times
   0 no response
   X incorrect response
   A attempts task

   Each child has a box of toy materials needed for the Special Skills session which is included in the cupboard.

6. Small Group Setting -- Selected objectives from each child's program are included during the session. Any relevant information regarding the child's behavior is written on the comment sheet.

7. Behavior Modification -- Records and notes of each child's sessions are included along with graphs which show the child's progress during the Behavior Modification sessions.

Within the framework of the master schedule, two child-care workers take rotating weekly responsibility for the administration of the activities. Activities are then discussed with the teachers before the start of the week when the child-care workers suggest to the teachers different activities that they would like to see incorporated into the program. Once the activities are planned, the child-care workers are responsible for the smooth running of the schedule. The two aides in charge of the weekly program must endeavor to make sure that activities are timed so that the whole program for the day is completed. At the end of the week all activities are evaluated by teachers and child-care workers. The list on the next page illustrates the type of self-evaluation done by the child-care workers. This evaluation is then discussed with the teachers.

Evaluation of the Program for the Week _____

Program Planners _____ and _____

Most Successful Group Activity

New songs in morning circle

New stories

Least Successful Group

There was no activity that was unsuccessful although in the circle if all the children are not strapped in, it can be very hectic.

Particular Challenges or Problems

On Wednesday some of the children were easily upset; an unusual day.

Staff

We met with a lack of enthusiasium for the first part of the week but it improved by the end of the week. We felt very frustrated because we didn't know whether it was because we were trying new things or what it was.

Other

Buses were late a few days shortening our morning circles.

And I Would Like to Say

We enjoyed doing the new activities and would hope that the other girls utilize some of the new ideas.

Reason for Success

Because they were new and active; they captured their interest.

Reason for Lack of Success

(In this case no reason was given.)

Child-care workers are directly involved in the teaching of children on a one-to-one basis and in aiding teachers in small group teaching situations. With respect to the Behavior Modification Program, child-care workers, under the guidance of the teachers, not only instruct but assist in choosing the specific skill to be taught and evaluating the level of the child's performance.

Within the time-frame set by the supervisor, the child-care workers are given the responsibility for determining the roster for staff coffee breaks, but the supervisor takes charge of the lunch schedules. Clean-up activities are determined by the child-care workers among themselves. Major cleaning tasks and reorganization of resources are done during every break (Christmas, Easter, end of June and the end of August) when children are not at the school.

Interpretation

The diplomacy of the Supervisor when acting as intermediary between child-care workers and teachers has undoubtedly reduced the ill-effects of an organizational structure that is at best cumbersome and at worst dysfunctional. Both teachers and child-care workers referred to the improved climate of cooperation. The opinions expressed were congruent with observed behavior.

The district Principal expressed current thinking in suggesting that ideally most exceptional children should find placement in the "normal" school. However, the two teachers felt that the functionally retarded would be better placed in a sheltered environment.

The activities which involved working with children in a teaching capacity were emphasized most by the child-care workers in assessing the rewards of their work. Because of their direct involvement in the teaching process, the child-care workers perceived themselves as more fortunate than were teacher aides and school aides in a traditional classroom setting. However, the child-care workers were aware that without further training they could not hope to be "in charge". Although involved in the planning of programs, many desired a still greater degree of autonomy and were aware that such autonomy could only be achieved through professional training. One mentioned an ambition to take an Early Childhood Program at The University of Alberta, while another mentioned tentative plans to acquire further education in the United States.

Child-care workers described their job as minimally paid. They explained that low pay and lack of opportunity for advancement, together with the minimal recognition given to prior training, insured that only those who found work with handicapped children very satisfying would stay at the centre.

Opinions

Funding through ECS does not recognize the needs of these children for full-time school attendance. All grants are computed on the assumption that students funded through ECS attend school on a part-time basis (i.e. 0.5 of the normal school day). The ECS funding even when combined with that from Special Educational Services is insufficient to provide the services of two fully-qualified teachers. However, even if one teacher alone were able to handle the educational program in the school, this would not be beneficial either to the teacher or to the clients. A teacher removed from the stimulus of colleagues with the same professional interests may experience difficulty in ensuring that the program is constantly reassessed, that the objectives of The Activity Centre are kept in mind, and that the quality is maintained.

In all school settings, teachers are apt to measure their professional success in terms of students graduating from one learning level to the next. The teachers in this school are little different in this respect. They speak with pleasure of those children who have made sufficient progress to meet the entrance requirements to other schools. Yet too much emphasis on "moving up" can only result in disappointment and frustration for teachers, child-care workers, parents and children alike. The major aims of the school are to improve the quality of life for children who might otherwise be institutionalized and to provide some relief to those families who must care for the functionally retarded/physically handicapped twenty-four hours every day. The attainment of this objective, therefore, is not to be measured by the number of "success" stories, however heartening these might be. All personnel who work in this setting must guard against the illusion that they may be able to work toward a "cure" for functional retardation. Teachers working in such an environment require maximum support from resource personnel outside the immediate educational institution.

BISHOP KIDD JUNIOR HIGH SCHOOL

(Calgary Roman Catholic Separate School District)

Bishop Kidd is a Junior High School with a program designed to meet the needs and interests of its students. The school staff has instituted a program which allows for individualized instruction, yet retains some of the features of a conventional, structured school setting. The employment of teacher aides, the use of learning packages and the advisory functions of teachers are some of the characteristics of the school program.

The following description about the school has been compiled from school staff interviews, questionnaires and logs, as well as from in-school observations made by a research team.

GENERAL DESCRIPTION

This school has approximately four hundred students and fifteen professional staff members and is located in a low socio-economic area of a large city. The professional staff consists of twelve classroom teachers, a teacher-counsellor, an assistant principal and a principal. Also, eleven paid teacher aides (10 full-time equivalents) are assigned certain duties within the school. Two secretaries are delegated general office duties. Between 30 to 35 student aides are assigned certain duties within the school.

The staff, professional and paraprofessional, is deployed into three teams, pontoons or divisions of learning. The paraprofessional staff are classified as either clerical or instructional aides.

Table 6.1

Instructional Organization

Division of Learning	Number of Professional Staff	Number of Paraprofessional Staff	
		Instructional	Clerical
Community of Man	4	4 (3 FTE)	1
Communications of Man	4	2 (2 FTE)	1
Technology of Man	4	2 (2 FTE)	1

Each division of learning is designated a resource room (2 to 3 classrooms in size), a presentation room (regular classroom size), and small group rooms (one-half a classroom size). The school also contains facilities for large group presentations, one regular gymnasium, a smaller gymnasium, a science laboratory and an art room. (See Figure 6.3.) The small gymnasium was the school library but because of an acoustical problem it has been converted to a gymnasium area. The library materials are now located in the three resource centres. Each of the divisions of learning (teaching teams) are delegated specific office and work areas.

DESCRIPTION OF THE SCHOOL'S STAFFING PRACTICES

The three major categories of school personnel are the professional staff, the paraprofessional staff, and the student aides.

To understand the deployment of staff at the school, a description of the school's philosophical and educational aims is needed. These aims are best exemplified by describing the PAK Project (A Program for All Kids) which was begun in 1973 by the principal and staff.

PAK (A Program for All Kids) Project

Philosophical and educational orientation. The PAK Project is an attempt to provide for change and allow for individualized continuous progress, while providing for the continuance of some selected aspects of the formal grade structure found in most schools. It emphasizes the belief that curriculum improvement entails reorganization of the academic program together with the importance of positive student attitudes towards school. Also, the PAK Project stresses the belief that any curriculum should focus on the basic skills and be relevant to the students' wants and needs.

Teacher-advisor role. The purpose of the teacher-advisor is to increase communication between the teacher, the student, and the parent. The teacher-advisor is not a counsellor but a motivator and a monitor of student needs. A student is assigned to a teacher and remains with that teacher as his/her advisee as long as he continues to attend this school. The PAK Project attempts to focus on the student rather than the school, so the teacher-advisor role is all-important.

Pontooning. Pontooning allows for team teaching and the interrelationship of several subject disciplines in a variable block of time. At the school studied, three pontoons have been established: Community of Man (Social Studies and Physical Education), Communications of Man (Language Arts and Religion) and Technology of Man (Science and Mathematics). These pontoons or divisions of learning each have four teachers and two or three teacher aides. A team

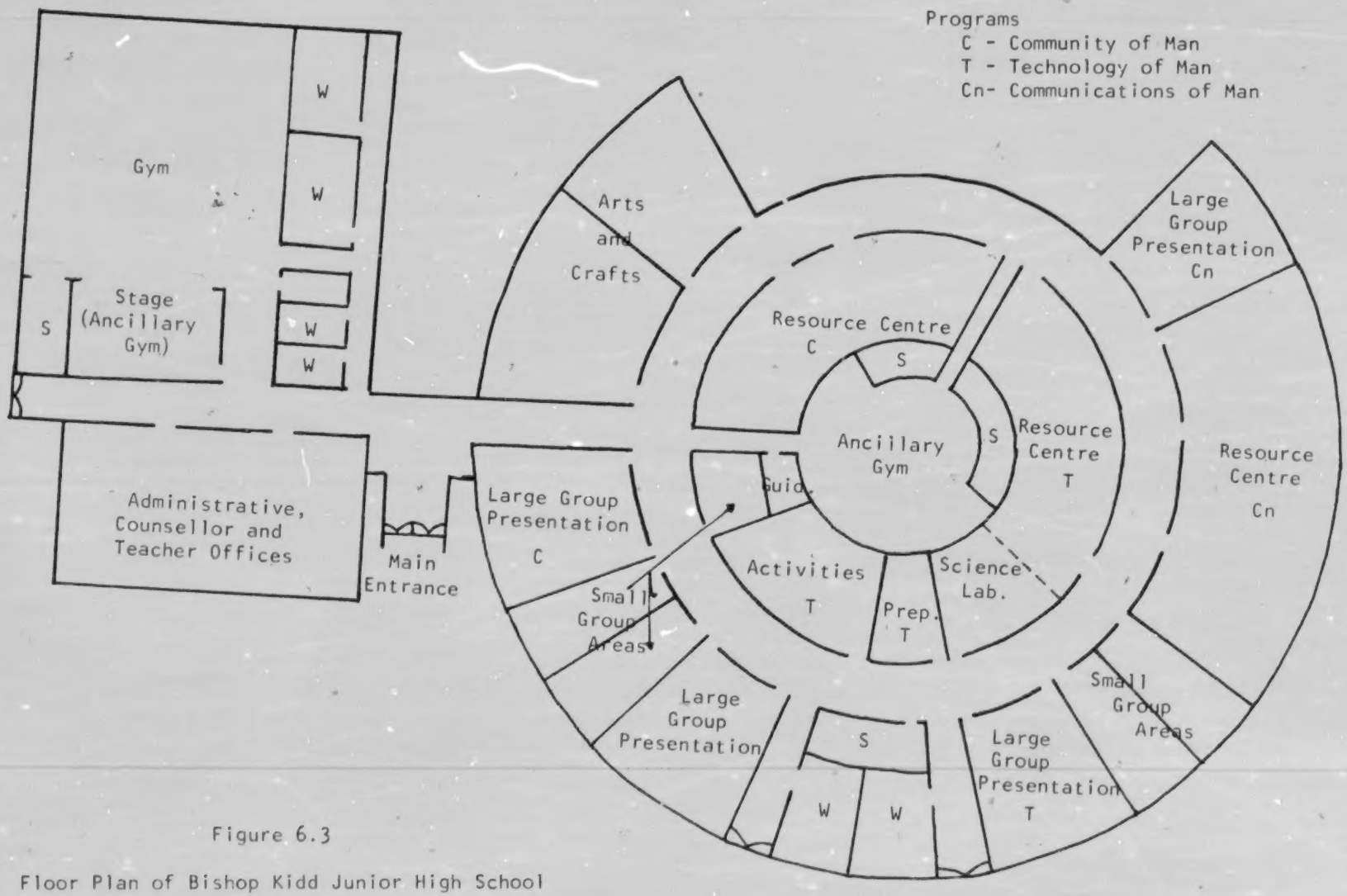

Figure 6.3

Floor Plan of Bishop Kidd Junior High School

coordinator calls meetings of the team, and meets with other team coordinators and the school administrators. The team is responsible for administration of its own budget, timetabling and deployment of its aides.

Instructional clusters. Several instructional group sizes are used to meet the demands of different instructional outcomes. The large-group presentation, the small-group instruction and the basic instructional cluster (20-35 students) are groupings used to facilitate the aims of the PAK Project.

Continuous progress and learning packages. Learning packages (unit-paks) are prepared and designed to accommodate different student learning styles, rates, needs and interests.

Independent study. Students are required to spend one-third to two-thirds of their school time in independent study. During this time, the student is expected to be working on the unit-paks of each subject.

Teacher aides. The teacher aides' main functions are to supervise certain student activities, duplicate materials and file student records, type and prepare specific educational materials, etc. The teacher aides are not responsible for diagnosis, prescription or evaluation. The principal suggested the categorization of teacher aides into two types: clerical and instructional. He also suggested the role of the clerical aide is basically the preparation of materials, while the role of the instructional aide is assistance with instruction and supervision.

Curriculum

The basic curriculum is divided into the three divisions of learning outlined above. These divisions of learning are scheduled each morning plus one afternoon. The three four-teacher teams of each division are scheduled with each grade throughout the week. This CORE subject curriculum is allocated approximately two-thirds of the instructional time.

For the other third of the time, options are offered which have the purpose of meeting the needs of the students based on their interests. Options are grouped into the following three areas: cultural and practical arts, general options, and recreational options. Options may be changed quarterly, semesterly or yearly, but in each quarter a student must be taking an option from each of the three option areas. Also, the student must choose one independent study option, but not more than two. Therefore, students have 12 (40-minute) option periods a week, with a possibility of two or four in each of the option areas and one or two independent study options.

Some examples of the types of options offered are the following: arts and crafts, oral Spanish, ecology, guidance, golf, cross country running, swimming, tennis, ceramics and independent study.

STAFF UTILIZATION AND JOB DESCRIPTIONS

Professional Staff

The professional staff of the school is comprised of the following personnel: principal, assistant principal, teacher-counsellor, and twelve classroom teachers. The principal has 75 percent administrative time, while the assistant principal has 70 percent administrative time. The counsellor-teacher is allocated 70 percent of his time for counselling and the remainder is spent teaching options or in the Technology of Man team.

The principal is responsible for the general control and supervision of all school operations. This includes coordination of resources, materials and facilities as well as parent-school involvement. The principal is responsible for the coordination of curriculum development, innovative projects, research projects and evaluation procedures.

The assistant principal is concerned with the specifics of program implementation and curriculum and is responsible for coordination of the duties of the paraprofessionals, discipline referrals, report card procedures, annual requisitions, and coordination of committee and team meetings.

Team coordinators administer, supervise, organize and coordinate (1) instruction and curriculum; (2) the preparation of unit-paks and courses of study; and (3) the functions of the team staff within their subject areas.

The counselling coordinator's responsibility is to provide counselling services to students, coordinate pupil-personnel programs and assist teacher-advisors regarding student counselling.

The classroom teacher has two main functions to fulfill. One is to plan and organize, with the other members of his division or learning team, methods of instruction for students in particular subject areas. The second is to act as a teacher-advisor for 30 to 45 students. Approximately one-third of each teacher's advisees are in Grade 7, one-third in Grade 8, and one-third in Grade 9. The teacher-advisor remains with the same group of students throughout Grades 7-9. The teacher-advisor is the major contact person for the parents. Other duties are preparation of advisees' report cards and contacting the counselling coordinator regarding serious problems.

Paraprofessional Staff

The teacher aides are responsible to the teachers they assist. Teacher aides are interviewed by the assistant principal and the team coordinators before they are hired. One of the major functions of the assistant principal is to oversee and coordinate the duties of the paraprofessional staff. Teacher aides are classified into two types: clerical or instructional. Clerical aide duties include typing, filing, and duplicating; while instructional aides assist teachers in the supervision of resource centres and other areas as assigned by a teacher. The majority of instructional aides have one or two years of post-secondary education. Some of the instructional aides have special talents in cultural or recreational fields. The clerical aides all have some typing training or experience.

The teacher aides are assigned to specific divisions or learning teams and are directly responsible to the team coordinator or teachers within that team. The present practice is to assign two or three instructional aides and one clerical aide to each division. The aides are employed for 10 months. The instructional aides are paid for 30 hours of work per week, while the clerical aides are paid for 32.5 hours of work per week. The rate of pay for the instructional aide is $3.75 per hour while the clerical aide receives $3.25 per hour. Aides are given job descriptions to guide them in fulfilling their responsibilities.

Student Aides

The student aides working in the school are fulfilling a requirement of the student option program. The students are put in positions of responsibility and are evaluated on personal attitudes and traits. They receive course credit for their time working as a student aide. None are paid. The majority of the student aides are in Grades 8 and 9. Most of the student aides spend two to four hours per week working as an aide.

The functions that student aides perform vary. The student aides mark and tabulate unit-paks, file materials, compile and staple unit-paks, keep house-league records, paint posters, and distribute audio-visual and physical education equipment.

Teachers have indicated that the student aides are a valuable addition, because their help relieves the teachers and teacher aides of some of their marking, filing, record-keeping and distributing tasks.

ANTECEDENTS AND INFLUENCES

The major antecedents and influences, identified by the researchers,

affecting present staffing practices are the expertise of the professional staff, the program and philosophy, the funding, and the attitudes of the Alberta Teachers' Association.

Staff

The school was built in 1967 and has been in operation for nine years. The present principal has been the administrator of this school for the last three years. He has had previous administrative experience at other schools including Bishop Carroll High School. Bishop Carroll High School was designed to provide for a high degree of individualized instruction and served as the basic starting model for the development of the PAK Project. The principal and school staff have adapted and changed the Bishop Carroll model to attempt to meet the needs and interests of Junior High School students. More structure is retained, yet individualized instruction is a major objective. Emphasis is also placed upon the teacher functioning as an advisor.

Eighty-five percent of the present teaching staff has been at this school less than three years. The present assistant principal was appointed in September 1975.

Program and Philosophy

The present principal of the school was the fifth principal to be appointed in a four-year period. The educational program he and the staff have developed over the past three years (PAK Project) is an attempt to provide an educational environment which meets students' needs, creates a more positive student attitude towards school, establishes control, and provides for better skill development.

The two main themes of the PAK Project are "accountability and flexibility." Accountability is sought by the use of learning packages (unit-paks), and the use of Canadian Test of Basic Skills (CTBS) scores as benchmarks for the acquisition of knowledge and skills. The students have greater control over the amount of work they attempt than students would have in a conventional school. The evaluation of students and the success of the program are based mainly on visible criteria such as CTBS scores, the number of unit-paks completed, the scores received on tests after the completion of the unit-paks, and a subjective evaluation of social growth. Flexibility is sought by the development of the pontoon system, divisions of learning, and a continuous progress model that "tends toward individualized instruction."

Funding

The school system allows the school principal to administer the school's decentralized budget. This is the common practice throughout

the school system. The principal is able to allocate monies within his school to the extent to which he desires (subject to Board approval). No special funding has been used in the implementation of the PAK Project.

Alberta Teachers' Association

The principal and teachers believe that as long as teacher aides do not diagnose, prescribe, and/or evaluate, then they are acting within the requirements of teacher aides as suggested by the Alberta Teachers' Association in their Utilization of Teachers' Aide Guidelines.

EXPECTED AND ACTUAL OUTCOMES

The information expressed in this section was obtained from questionnaires, logs and interviews. These were completed by the administrators, a majority of the teachers and the teacher aides, and some students. Observations of the school by the study team also supplied much information.

Expected Outcomes as Perceived by the Administrative Staff

The PAK Project was perceived by administrators to introduce a greater degree of "accountability" and "flexibility" than was available in the school before the inception of the PAK Project. The academic achievement of the students was expected to improve, and the program was expected to be adaptable to the needs and interests of the students, yet retain much control over the behavior of the students.

The role of teacher-advisor was expected to improve relationships between teachers and students. Some continuity would be achieved if the student has the same advisor throughout his junior high school term.

The use of paid paraprofessionals was expected to release teachers from many of their repetitious, non-instructional tasks and to provide time for curriculum and program development, as well as time for consultation with individual students.

Actual Outcomes as Perceived by Teachers and Teacher Aides

With respect to the employment of teacher aides, the teachers are satisfied, they enjoy the resultant flexibility achieved, and concur

that both clerical and instructional aides are necessary for the school program to continue. The presence of teacher aides has changed the tasks that teachers perform. The teachers perceive that their clerical and technical tasks have been greatly altered by the presence of teacher aides. Other task areas where considerable change has been noticed is in communication and planning. The principal perceives a greater change as a result of the presence of teacher aides than do the teachers, especially in the instructional and supervisory task areas. The different definitions given to supervisory functions by the teaching staff and the principal could be a reason for these different perceptions. The teachers probably define supervisory functions as out-of-class supervision and classroom control, while the principal considers the directing of clerical and instructional aides as part of the supervisory function of teachers.

A questionnaire was completed by the teachers and the teacher aides. The information that follows describes some of the perceptions of the teachers and teacher aides and some of the disparities between these perceptions. The questionnaire differentiated educational tasks into seven task areas: instructional, emotional, supervisory, clerical, technical-housekeeping, communication and planning. Two types of teacher aides were considered: clerical and instructional. Some disparities are evident between the desires of the teachers and of the teacher aides.

In the instructional and emotional task areas, clerical and instructional aides desire more involvement with small groups and individual students in an instructional setting. The instructional aides feel they are ready and have the expertise to do more "instruction and teaching" than they are doing at present. They feel that the constant marking of unit-paks takes too much of their time, and their expertise and talents are not being put to the best possible use.

In the supervisory task area, teachers are prepared to "give up" some of their out-of-class supervision to the instructional and clerical teacher aides. However, the teacher aides do not want this responsibility, and have indicated in the questionnaire responses that they already have too much out-of-class supervision.

In the clerical task area there is little noticeable difference between the wishes of the teachers and teacher aides for activities that teacher aides should perform.

Teachers desire clerical and instructional aides to have more involvement in some technical-housekeeping tasks. This desire is especially noted in the preparation of audio-visual and laboratory materials. The teacher aides have indicated that they are satisfied with their role in this task area.

In the communication and planning task areas both instructional

and clerical aides wish to have more discussion with teachers about individual students. Teachers seem to be generally receptive to this suggestion.

Many of the above disparities can be overcome once they are exposed and discussed. The main disparity seems to be that teacher aides want more personal involvement with students. They feel that their talents have not been fully used and are waiting for the teachers to provide situations where this wish may be fulfilled. The desire on the part of teacher aides for more involvement with students may be due in part to the fact that most of them are university students, many of whom are preparing for a career in teaching. Teachers' perceptions of the ATA and school board positions on utilization of aides may explain, in part at least, their reluctance to involve aides more fully. (See Calgary RCSSD Regulation included in the St. Mary's Community School description.)

Teachers rated both categories of aides positively in terms of their knowledge, skills, reliability and interpersonal relationships, but the clerical aides consistently were given a higher assessment than the instructional aides. Teachers and principal unanimously agreed that teacher aides are of great value in the school, and that their employment should continue.

The majority of teachers favored a ratio of three teachers to three aides over a choice of four teachers and no aides, or two teachers and six aides.

The assignment of teacher aides to specific teams or the divisions of learning was rated as a positive feature, in that the teacher aides knew to whom they were responsible and acquired knowledge specific to that area.

Table 6.2, Utilization of Time by Teacher Aides, is a compilation of information recorded in a log the teacher aides kept for a day. Nearly three-quarters of the clerical aide time is spent preparing and locating materials. The clerical aide spends a small amount of time directly interacting with students in a class situation. The clerical aides interact somewhat with students in the independent study sessions in the resource centres, and also when they perform out-of-class supervisory activities. Approximately one-third of the time of instructional aides is spent interacting with groups of students or with individuals during independent study periods. However, the majority of their time is spent marking and correcting unit-paks and tests.

Interviews and observations verified the information supplied in the logs and questionnaires. The teacher aides did not complain about the type of work they were doing, but they wished they had more opportunity to work directly with students. They perceived their role to be more helping than controlling in that they felt they could be of substantive help in content areas. It is possible that the ATA policy

Table 6.2

Utilization of Time by Teacher Aides

Types of Activities Performed	Percentage of Aides' Total Time
Clerical Aides	
Preparation of Materials	51
Locating of Materials	22
Supervising Non-Class Activities	7
Evaluating and Recording	6
Reading and Research	5
Arranging Field Trips	5
Other Tasks	4
Instructional Aides	
Evaluating and Recording	51
Interaction with Groups of Students	16
Supervising Resource Centre	16
Locating of Materials	8
Supervising Non-Class Activities	3
Discussion with Teachers	3
Other Tasks	3

on the utilization of aides may affect the practice in this regard. Some dissatisfaction arose with the uncertainty of daily tasks and the lack of communication with teachers. The teacher aides felt that they were the last to be informed about events taking place concerning their team or the school. Some aides felt they should be included in the team planning sessions. However, the main source of dissatisfaction was the low pay schedule. The pay of the teacher aides is a minimal hourly rate, and the number of paid hours per week is much less than a person would normally work. This seems to be a common complaint of most teacher aides. If the schools or school systems are planning to make extensive use of teacher aides, and make the job a career position, then an increase in teacher aides' wages should be considered.

Teachers were also asked to record their activities for a day in a log. On the average teachers spent sixty-three percent of their time in interaction with students, thirty percent in planning and organizing and seven percent on other tasks. The information from their logs is summarized in Table 6.3.

Approximately one-third of teacher-student interaction time is spent in each of the formal lecture, tutorial, and individual modes of instruction. One-third of the instruction is given in the regular classroom size of 20-35 students. This indicates that a large part of the instructional program in the school is still given in the conventional manner.

Over forty percent of the planning and organizational time of teachers is spent in evaluating and recording student progress. Mainly this involves the marking of unit-paks and the grading of tests. This indicates that the quantity of material the students produce must be quite extensive.

Little of the formally-assigned planning and organizational time (up to approximately five hours per week) was spent in discussion with other staff members. Much of the organization and planning for the teaching team probably takes place in informal interaction and discussion.

The time spent by teachers on clerical activities is very minimal as compared with the time spent on clerical activities by teachers in a conventional school.

For every two hours spent interacting with students, the teacher, on average, spends another hour planning and organizing.

Some of the information expressed by the teachers in the interviews, logs and questionnaires suggest possible future directions. Many of the teachers felt they were not fulfilling the advising part of their role to a desirable extent. Also, some teacher frustration occurred over the policing function they must fulfill in the resource centres. The 40 to 70 students working on their unit-paks need to

Table 6.3

Utilization of Time by Teachers

Types of Activity	Percentage of Time
Interaction with Students	
Formal Lecture (20-50 students)	21
Counselling, Advising Students	16
Supervising Independent Study	15
Tutorial Session (20-35 students)	12
Formal Lecture (>50 students)	10
Tutorial Session (36-50 students)	8
Tutorial Session (11-19 students)	7
Supervising Non-class Activities	7
Other Types of Interaction	4
Planning and Organization	
Evaluation and Recording	42
Preparation for Classes	33
Developing Instructional Objectives	18
Clerical Activities	4
Other Tasks	3

be frequently reminded to "get to work." Several teachers commented that the major part of their time in the resource centre is spent controlling the students, not in helping with individual difficulties. The comments of some teacher aides and the limited number of observations carried out by the study team supported this contention. However, it is claimed by others that this is not true for a majority of teachers.

Teachers suggest that role expectations and job definitions for the aides are essential. The clerical aides' role is easy to describe; however, the instructional aides' role is not as clear.

Another suggestion was provided by the teachers. If the use of teacher aides is going to become a common practice in Alberta schools, then teachers need training in how to use the services of teacher aides most effectively.

Outcomes as Expressed by Students

Most students enjoy their school life, are satisfied, and like the independence and flexibility they have in working on their own. The option program is enthusiastically supported by the students mainly because of the choice and variety of options offered.

The main disadvantage with the school program, as expressed by a few students, was that some students are unable to cope with the independence and flexibility.

The relationship with teachers and teacher aides was friendly and casual. The students had no reservations about making arrangements to see their teacher-advisor when necessary. Also, teacher aides were a welcome addition to the school staff, because they helped the students in independent study, marked their work, and assisted in assembling, distributing and collecting unit-paks.

The information from the students' logs are summarized in Table 6.4. The students recorded that thirty percent of their school time is spent on independent study. The time allocated to independent study on the students' time tables is between thirty-six and fifty percent. Some of the student time scheduled for independent study probably is spent socializing with other students.

Further, the student logs indicated that a substantial amount of their time is spent in a regular class size group of twenty to thirty-five students. This concurs with the data from the teachers' logs that about one-third of school time is spent in a normal, conventional, structured class setting.

The percentage of time spent in small groups, i.e. from two to nineteen students averaged 10 percent. In large groups, i.e. more than

thirty-five students, the average was 7 percent. Student time therefore appears to be mainly divided between independent study and class groups of over twenty students.

Table 6.4

Utilization of Time by Students

Types of Activity	Percentage of Student Time Spent in School
Independent Study	30
Class Size Group (20-35 students)	29
Socializing	13
Class Size Group (11-19 students)	7
Class Size Group (>35 students)	7
Other Types	7
Meeting with Teacher	4
Small Group (2-10 students)	3

SUMMARY AND INTERPRETATIONS

The school staff is deployed into three teams or pontoons. Each team consists of four teachers, a clerical aide and two or three instructional aides. Differentiation of functions among the teaching team members is minimal. The only exceptions are the team coordinators, who are responsible for some administrative and coordinating duties. More sharing and cooperation among the staff occurs than would probably take place in a conventional school.

The teachers' main functions are instructing, developing curriculum, and advising. The majority of the teacher's time is spent on curriculum development and instruction. The administrators and teachers feel that the advisor function needs to be emphasized to a greater extent that it is at present.

Administrators, teachers and students agree that the continued use of teacher aides (instructional and clerical) in the preparation,

organization, and marking of unit-paks is necessary if the instructional program is to continue. Also, the assistance of instructional aides in supervising students in independent study and the participation of some instructional aides in the options is necessary for the aims of the PAK Project to be attained.

The aides desire more interaction with the students and wish to be considered as part of the instructional team. Other suggestions made by the teacher aides are the need for training teachers in the use of teacher aides, and the need for training of the teacher aides in specific skills that are used in performing teacher-aide functions.

Students appear to like the program as evidenced by their enthusiasm. Their academic achievement, on the whole, has improved since the inception of the program in 1973. The students have friendly and casual relationships with most of the present staff.

Students, teachers, teacher aides and the school administrators seem to be satisfied with the program and with the results. Some changes are contemplated for the program to overcome minor difficulties. The experiment does appear to have considerable merit and to be deserving of close examination by other junior high schools.

CALLING LAKE ELEMENTARY-JUNIOR HIGH SCHOOL

(Northland School Division)

Calling Lake School is one of thirty-three schools comprising the Northland School Division. This school division has a number of unique characteristics which should be kept in mind when examining the staffing patterns of schools under its jurisdiction. Not the least of these is the large native Indian and Metis population within its boundaries.

Northland School Division is a relatively young school system: it was established by Ministerial Order in 1960. At the time of its creation and for most of the years following, the Division was, in essence, a ward of the Provincial Government. As such, an Official Trustee appointed by the Provincial Government carried out the functions normally performed by an elected board of trustees. In the early years, the Division offices were in Edmonton.

In 1965, the *Northland School Division Act* was passed which recognized that the Division was a special case under the *School Act*. The *Northland School Division Act* contained two important provisions. The first of these was that members of the school board were appointed by the Lieutenant Governor In Council rather than elected as in other divisions. It was not until 1968, when the number of trustees was increased from five to seven, that a member of native origin was appointed. Since then, the composition of the board has moved significantly toward native and local participation and control. Presently, five of the trustees are native representatives. The remaining two members are the chairman, who is also the chief executive officer of the board, and an officer of the Department of Education whose main responsibility is to maintain close liaison with the Department of Education.

The second major provision made by the *Northland School Division Act* was to enlarge the Division's territorial responsibility to include all the lands within the province north of Township 55 which were not already included in any other school jurisdiction or Indian Reserve.

In 1971, for reasons relating to efficiency of operation and service, the Government moved the Northland School Division Headquarters from Edmonton to Peace River.

The main characteristics which differentiate the Northland School Division from the norm of school divisions in Alberta were listed in the *Report of the Northland Study Group to the Minister of Education* (1975). These can be paraphrased as follows:

1) An extremely large geographical area;
2) A wide dispersion of communities and the relative isolation of these;
3) A large number of schools (33 as compared to the median of 9 in Alberta divisions and counties);

4) A relatively low tax base (requiring that practically all of its revenue come from the Department of Education);
5) The need to provide accommodation for staff and to supply utility services for residences and schools;
6) Difficulty in recruiting and retaining teachers;
7) Lack of high school services; and as already mentioned,
8) Clientele mainly of native origin, with a historical, cultural and linguistic heritage different from that of most Albertans.

The Calling Lake Settlement

The settlement of Calling Lake is located due North from Edmonton, approximately forty miles from the Town of Athabasca on a good gravel road. The surroundings are quite scenic, and the development of a provincial park is underway close by. This action will undoubtedly have a marked effect on the community as it will probably speed up its development as a resort area. The few buildings that there are in the settlement are scattered along a narrow strip fairly close to the lake. The school, teacher residences (trailers), and Health Unit trailers are clustered together at a fair distance from other residences. Stretching south of the village for approximately two miles is a development of about 200 recreational cottages. The socio-economic level of the permanent residents is generally low, as is the case in the majority of schools in the Division.

DESCRIPTION OF STAFFING PRACTICES

The Calling Lake School has a total of seven classrooms, five of which are in the main building and two are housed in nearby self-contained portable units. The main structure was built in three stages with the first dating back to the mid-1950's and the last being barely one year old. The school has an adequate gymnasium and playground. As is the case with most other schools in the Division, the Calling Lake School must provide its own water supply and sewage disposal. It is, however, connected to the provincial grid for electric power and telephone. The principal reports the need for him to spend considerable time in caring for such matters as the heating system since there are no maintenance personnel in the school.

Pupil Personnel

Approximately 127 students, ranging from pre-school to Grade eight, are enrolled in the Calling Lake School. Most of the children are of native origin, being either Indian or Metis, and English is their second language. The children are generally characterized as being shy; many are reluctant to speak in the classroom even though they may be quite able to communicate in English. Teachers felt that their students on average required more individual attention than the typical urban middle-class child. More individual attention would presumably provide the children with increased opportunities for expression and hopefully would enhance

the development of more self-confidence. One of the nagging problems is poor school attendance, a problem that seems to worsen as the child grows older. Performance and attitude in school are said to be affected by such out-of-school influences as family problems, alcohol abuse, lack of adult models in the community having attained success because of schooling, and the paucity of mental stimulation in the home in the form of books or games. Generally the level of educational achievement was felt to be low, when judged by such indicators as drop-outs and retardation.

Professional Personnel

Calling Lake School has a professional staff of seven teachers including the Principal, 25 percent of whose time is scheduled for administrative activities. One of the teachers is designated as Vice-principal but has only two periods per week allocated to this function. Five teachers are assigned to homerooms and all but the grade one class are "doubled-up." The two remaining teachers share the responsibility for the "Special Education" class on a half-time basis and are "Floaters" for the remainder of the time. This arrangement provides each homeroom teacher with four forty-minute periods per week for lesson planning. Of the seven teachers on staff, three were in their first year at the Calling Lake School, two were in their second year and two, including the Vice-principal, had been at the school for over four years. At least half of the teaching staff have been recruited from outside Canada.

Paraprofessional Personnel

The Calling Lake School employs four full-time paraprofessionals, two of these are teacher aides, one is a counsellor aide and the fourth is an Early Childhood Services (E.C.S.) Instructor. In addition, a clerk-typist is also employed for approximately twenty hours per week. Two of the paraprofessionals have been at the Calling Lake School for four years and two are in their first year. The E.C.S. Instructor has been responsible for the pre-school program in Calling Lake for five years but only for the past two years has she been in the employ of the Northland School Division, that is, since Northlands assumed responsibility for the pre-school program.

UTILIZATION OF STAFF PERSONNEL

Because of the low enrollment in individual grades and the need to "double-up" all of the grades except Grade one, teachers are required to teach most subjects to two grades. As indicated earlier, the "floating teachers" pick up some specialized subjects such as Art, which provides homeroom teachers with some released time for non-instructional activities. The teacher aides are assigned to the Grade one class and to the Grade two/three class in accordance with the Divisional policy which provides for teacher aides primarily at the Grade one and two level. The counsellor aide and the part-time clerk-typist serve the whole school.

ANTECEDENTS OF PRESENT PRACTICES

In 1971, at the urging of the native members of the Board and particularly on the initiative of Mr. J. Ducharme, the Northland School Division piloted its Paraprofessional Program by sponsoring five candidates in the training program at Mount Royal College in Calgary. The following year the School Division instituted its own training program in collaboration with the Alberta Vocational Center at Grouard. The main motivation for this paraprofessional program was the perceived need by the native members on the Board to provide a better means of assisting native children to succeed at school. The belief that children need to experience a feeling of success in order to continue attending school was the major premise underlying the decision to embark on the program. It was thought that many children were not succeeding in large part because of difficulty in communication, which in turn led to discouragement and frustration accompanied by low rapport between child and teacher. It was noted that many of the children came to school with little or no knowledge of English. Since Cree-speaking teachers were not available, the Board felt that the next best alternative was to assign someone to each classroom to act as interpreter between teacher and students for the first year or two. The Board undertook therefore to prepare and present a proposal to the Department of Education which recommended that one teacher aide be placed in every school and one counsellor aide in each of the larger schools or where special circumstances warranted such assistance. The teacher aide was to work within the school, whereas the counsellor aide was to work largely in the community, to interpret the community to the school, and the school to the community. The Department of Education agreed with the basic argument concerning the need to bridge the language and culture gap and hence gave its approval to the program. By 1972, twenty of the thirty schools were supplied with teacher aides. At the beginning there seemed to be some skepticism on the part of the teaching staff regarding the paraprofessional program. This was possibly due to the experiments which were being carried out with differentiated staffing in other parts of the Province and the widely-held perception that the Alberta Teachers' Association was against programs which used nonprofessionals in the classroom. Discussions involving the Teacher-Board Advisory Committee and the Administration Committee led to an acknowledgement that the Northland situation was quite unique and to the realization that this program was not to be a means of reducing the teacher-pupil ratio in the schools.

For the first two years of the program, despite the acknowledged desirability of having candidates possessing Grade nine education or higher, some candidates with only Grade five were selected because they were the best of those available whom the community would accept. The training courses held each summer concentrated on providing some basic Psychology courses designed to ensure that at worst the aides would not cause harm to the children. It was assumed that they possessed sufficient relevant knowledge and skills to be able to provide useful assistance to the teachers and students.

Some of the first paraprofessionals were of somewhat limited usefulness because of inadequate education and training. In addition, some teachers, not knowing how to utilize teacher aides, assigned more responsibility to them than was warranted. The latter seemed to be true especially when multiple grades were involved. Another problem encountered occasionally related to opposition to the teacher aide from factions within the community. These problems appear to have been reduced by specifying quite precisely in the "Job Description" the tasks which could be performed by the teacher aides and also by ensuring community participation in the selection process.

Funding for the program was obtained initially through the "Special Grants Committee" of the Department of Education. A grant totally $250,000 was made available to get the program underway. During the current year, the $750,000 required to operate the program is appropriated through the yearly budget for the School Division. Approximately $30,000 of the present appropriation is required for the compulsory summer In-Service Training; it should be noted however that this amount does not include the two-month salary paid to the paraprofessionals who attend the courses. The current operating budget for Northland School Division is $7,800,000.

INFLUENCES UPON PRESENT PRACTICES

It appears that the greatest influence upon the staffing practices as they are found in the Calling Lake School is exerted by the Northland School Division through its policies governing staffing. These policies give the rationale for the employment of aides, describe the criteria for their selection and the selection procedures to be utilized, outline the guidelines governing the placement of aides, list the schedules of remuneration and hours of work, and, finally, itemize the duties to be performed. The paraprofessionals are assigned to the school, and the Principal, together with the staff involved, directs their day-to-day activities in accordance with the policy guidelines.

Despite the isolation of the community, there appeared to be fairly good opportunity for the Calling Lake teachers to share ideas with staffs from other schools. The extent to which schools influence one another regarding the use of paraprofessionals, however, was not clear.

The community exerts influence on staffing mainly through its involvement in the selection process. The community nominates candidates from the community for appointment to paraprofessional positions in the school.

OUTCOMES

As indicated above, of the five paraprofessionals employed at the Calling Lake School, two were teacher aides, one was a counsellor aide,

one was an Early Childhood Services Instructor and the other was a clerk-typist. Each of these positions is discussed below.

Teacher Aides

Interestingly, the teacher aide assigned to the Grade one class was a male in his forties or fifties. He was in his first year as a teacher aide. It was felt that he provided a welcome and perhaps needed "father image" in the classroom.

The other teacher aide was female with a Grade 12 education who became a teacher aide because she wanted a change from secretarial work and was one of the first teacher aides to graduate from the training course offered at the Alberta Vocational Center in Grouard. In view of her educational background and experience, it was generally agreed that she should perhaps go on to become a teacher. The responsibilities assigned to her were quite extensive.

The Early Childhood Services Instructor had been involved with the pre-school program in the Calling Lake community when this program was under the sponsorship of Preventative Social Services. With the advent of the E.C.S. program, responsibility for the pre-school group was transferred to the Northland School Division. The Instructor who is bilingual in Cree and English won the competition for the new position. She was required to take a three week course to qualify as an E.C.S. Instructor, followed by the mandatory summer school In-Service program. As the sole person in charge of the pre-school group, she is fulfilling an important role in orienting pre-school children to school; for many this is also their first orientation to English as a medium of communication.

The counsellor aide had responsibility for visiting the homes of school children at least once a year and more often where attendance or illness seemed to be a problem. With her background and training she seemed able to relate to members of the community in ways which would be difficult or impossible for people with a different background. Even so, she admitted to some problems, for example, related to school attendance, which she was unable to resolve. In addition to serving Calling Lake School, for one day a week she performed counsellor duties for Calling Lake youngsters attending grades nine through twelve at Athabasca High School.

The Clerical Aide

The clerical aide, employed on a part-time basis, worked twenty hours per week in the Calling Lake School as a clerk-typist. She did some work for the teachers but stated that most of her time was spent on office-related duties.

Outcomes as Perceived by the Board

In appraising the paraprofessional program in the Northland School Division, the Board Chairman makes a clear distinction between the teacher aide segment and the counsellor aide segment. The teacher aide program was judged by the Board Chairman to be highly successful. The overriding factor which caused the program to be instituted, as mentioned earlier, was the need to overcome the language and cultural barriers which were perceived to exist for the children in Grades one and two. From that point of view the teacher aide program was undeniably successful; it did place in each school of the School Division persons who were selected partly on the basis of their ability to communicate in both Cree and English. Whether the presence of these persons in the classroom also contributed to the attainment of other related objectives such as increased willingness on the part of the young native children to participate in classroom verbal interaction or improved student attitude toward school has not been formally assessed. From the Board Chairman's perception, the consensus of those people who might be regarded as well-informed on these matters is that there has been some improvement. No opinion was voiced regarding any improvement in achievement by the students since it was felt that it may be too early to tell and also that this would have to be measured by standardized tests.

It was felt at the Board level that the mandatory summer school In-Service Training Program was paying off in that it equipped the aides with at least a minimum of basic skills and knowledge in order for them to be able to function in the schools.

The counsellor aide program was assessed not nearly as favorably. It was recognized that the role of the counsellor aides as described in the "job description" was an extremely difficult or perhaps impossible one. Ideally the Counsellor Aide was required to "keep all the kids happy and going to school and the parents happy and content," a monumental task for even a highly trained public relations professional in a middle class community, let alone a minimally trained individual operating in a community where motivation and aspiration are often low.

Outcomes as Perceived by Teachers

Teachers generally felt that the presence of paid paraprofessionals brought little change to their performance of tasks related to instruction, to extracurricular activities, to caring for the emotional needs of children, and to planning. This is not surprising since only two have direct access to teacher aides. Most of the teachers were, as in the past, continuing to work independently in self-contained classrooms, performing the conventional instructional tasks with very little formal collegial consultation outside of staff meetings. An exception to this was the coordination of subject content for the two Grade five classes. Considerable informal discussion on a variety of topics was held during out-of-class time. It should be noted here that most teachers came to the Calling Lake School when the paraprofessional program was already in effect.

Some change was reported to have come about in the teachers' performance of tasks of a clerical nature and also those of a technical nature.

Questionnaires completed by all of the teachers in the school listed tasks which the teachers felt that the paraprofessionals should perform and the extent to which these were perceived to be performed at present. There was practically unanimous agreement in the responses concerning tasks which paraprofessionals should not perform. Teachers agreed that paraprofessionals should not perform tasks related to student discipline. This is consistent with School Board policy on the matter.

Concerning tasks related to instruction, teachers expressed the view that paraprofessionals ought to be involved to a considerable extent in helping individual students as well as in working with small groups of children. Their perception generally was that this was taking place to only a minimal extent.

Most teachers would have liked to see the paraprofessionals play a greater role in assisting students with their emotional needs, for example in motivating students or "talking to an upset student."

Regarding the supervision of students, the teachers appeared to favor increased responsibility by the aides although the latter were already involved to some extent in this way and were considered to be of help. Some teachers wished to be relieved of supervision duties entirely, while others saw merit in remaining involved to some extent.

With reference to the preparation, duplication and filing of instructional material, teachers indicated that paraprofessionals should be involved to a considerable extent rather than to the somewhat limited extent now perceived. Similarly, they felt that keeping records of attendance and other tasks of a clerical nature should be handled by aides.

In the domain of technical-housekeeping tasks, there appeared to be dissatisfaction with the limited extent to which the aides assisted with the setting up and operation of A.V. equipment as well as the preparation of A.V. materials to be used. It was also generally felt that little or no assistance was being provided with keeping classroom materials in order and that help in this regard was desirable. The reader is reminded that most teachers did not have aides working with them who could be assigned these responsibilities.

Finally regarding planning, teachers expressed a desire to see more contribution from paraprofessionals with such activities as field trips.

Outcomes as Perceived by Paraprofessionals

The paraprofessionals generally felt that their work was clearly defined. They, like the teachers, were quite in agreement as to what tasks paraprofessionals should not do, notably janitorial duties. It is

interesting to note that this was not mentioned in the set of tasks identified by the teachers as those that paraprofessionals should not do.

Concerning instruction-related tasks and tasks related to the emotional needs of children, the paraprofessionals perceived themselves as having "some" to "considerable" involvement. The feeling was expressed however that contact with children should not be restricted nor should the teacher aide have to work only with "slower" groups.

In relation to the supervision of children, the paraprofessionals did not see themselves as being very heavily involved nor did there appear to be much enthusiasm for the idea of being involved to a greater extent.

The paraprofessionals perceived that they helped only to some extent with clerical duties such as preparation of materials and duplicating. Only the clerk-typist did any typing being the only one of them having typing skills.

Concerning technical-housekeeping tasks, the paraprofessionals were not involved with library records, probably because the library was not yet fully operational, but felt that they did assist quite a bit with the setting up and operating of A.V. equipment. They also felt, contrary to the teachers' perception, that they did help significantly with keeping the classroom in order, probably more than they desired.

With regard to relating to the community, the teacher aides felt that this was mainly the responsibility of the counsellor aide and that they therefore should not be involved to any great extent. The counsellor aide, it should be noted, spent a large portion of her time attempting to resolve attendance related problems. All paraprofessionals felt that they quite frequently provided information to teachers concerning particular students.

Finally, most paraprofessionals felt that they were to some degree involved in planning with the teachers.

Student and Community Perceptions

While time did not permit much in-depth investigation of these last two levels, the impression obtained from general observations and from interviews with the school staff was that the children appeared to be generally quite receptive of the paraprofessionals and in some cases seemed to overcome part of their shyness.

The reaction toward the paraprofessionals within the community, apart from a few instances where faction rivalry seemed to be associated with the problem, was favorable. At first, it is reported that the community looked to the paraprofessionals in wonderment but soon came to regard them much as they do the teachers. The community, it would appear, has even come to expect a certain standard of behavior outside of school for their paraprofessionals as it has for their teachers.

FUTURE OF PROGRAM

The feeling at the Board level is that the paraprofessional program was doing the job that it had been created to do. The main objective of the program has not changed and it is forecast that the need for it will continue for another ten years. While no expansion of the program is anticipated, the program as it stands will carry on.

The training program is seen as a critical component of the overall undertaking and in it is placed much hope for the improvement of the paraprofessional program generally. More specifically the following emphases are planned in order to bring about this improvement:

1) The continuation of the compulsory yearly summer school In-Service Training for all teacher aides and counsellor aides in collaboration with the Alberta Vocational Center in Grouard. Shorter terms have been introduced so that the participants will not have to be separated from their families for a full six weeks at a time.

2) The upgrading of the basic level of education of the paraprofessional staff now employed.

3) The raising of selection qualifications as more candidates possessing higher academic qualifications become available.

The hope was expressed that some of the better qualified paraprofessionals will go on to become teachers in the near future. Two former teacher aides, assisted by bursaries from Northland, are presently enrolled in the teacher preparation program of Project Morningstar at Blue Quills and should receive special teaching certificates after two years.

As teachers from such programs graduate, they would probably be assigned to Grades four through six and the teacher aides would continue to function in Grades one through three. When enough teachers who are able to converse in both the Native and English languages become available to staff the primary grades, the present paraprofessional program could either be phased out or have its purpose changed.

The counsellor aide program with its acknowledged shortcomings is going to be an area of concentrated attention, with particular emphasis being placed on the selection of candidates with appropriate personal dispositions in the hope that with more adequate training their chances of success in the field will be increased.

It is recognized that presently in the Northland schools the adult to pupil ratio is comparatively higher than that found in most schools in Alberta and it is likely that when the language problem is resolved, this ratio would be reduced.

INTERPRETATIONS

Generally the value of having paraprofessionals in the school appears to be accepted, particularly for the primary grades where it is felt to be most important in order to bridge the language and culture gap. Teachers claim that they are pleased with the program and enjoy good working relations with the paraprofessionals: the reverse also seems true. Nevertheless, when reference was made to specific tasks, while they seemed on the whole to agree on what the tasks are, mainly those outlined in the Division's policies, they did not agree on the extent to which the tasks were actually being performed. A notable exception to the aforementioned general agreement is the one related to supervision of students.

It appears that while the teacher aides recognized that they were under the direction of the teacher, they seemed to feel accountable to the Principal, rather than to the teachers. It should be noted here that summative evaluation of the paraprofessionals is the responsibility of the Principal and the Supervisor of Instruction for the School Division. This evaluation was reported to be based on the following three criteria:

1) ability and willingness to cooperate with teachers;
2) attitudes towards children and learning;
3) ability to communicate in the English and Cree languages with students and teachers.

There is some probability that teacher aides can be given responsibility beyond that warranted by their training. Possibly an In-Service workshop or summer course for teachers on the topic of how to utilize paraprofessionals may be worth considering. This should improve the effectiveness and efficiency of the aide program.

The counsellor aide program may not be as effective as it might be, possibly because the counsellor aides are expected to do and are attempting to do the job of a full-fledged counsellor/social worker rather than acting as an aide to these professionals. In situations where there is no qualified counsellor in the school, as is the case in the Calling Lake School, the specific duties assigned to the counsellor aide may need to be greatly curtailed.

In conclusion it should be stated that the staffing patterns found at the Calling Lake School are designed to serve a situation and specific needs quite different from those found in the majority of Alberta schools. The effort to respond to this unique set of needs could have led to substantially different solutions being attempted. However, the particular program that was instituted seems to be well suited to needs of the school and is apparently quite effective.

M.E. LaZERTE COMPOSITE HIGH SCHOOL

(Edmonton Public School District)

General Description

This senior high school, opened in 1970, is one of the newer and more innovative schools in Edmonton. During 1975-1976 more than 1800 students attended the school which provided academic, vocational and business education programs. On staff were 76 teachers and educational administrators, and 25 paid paraprofessional and support personnel.

The school administrators and staff provide programs in accordance with the needs and interests of the students. A number of program innovations, reflecting a community-school orientation, have been introduced. This particular school was included in the study because of the flexible use of teaching teams, the innovative developments in school governance, the strong community-orientation influencing the school's development, and the integrated use of paid paraprofessional personnel.

In obtaining information for this report, interviews were conducted and all members of the teaching staff were requested to respond to a questionnaire. A 50 percent return was received for the questionnaire. The personnel interviewed for the report were the principal, one assistant principal, six department heads, one department chairman, ten teachers, fourteen paraprofessional staff members and four adult volunteers. Some information was also obtained from central office administrators.

CURRENT STAFFING PRACTICES

The staffing practices used at the school reflect the philosophy that has emanated from the underlying purpose of developing a community-oriented school. To describe the current staffing practices, the following aspects are considered -- school governance; school department staffing practices; and staff utilization in the main innovative programs.

School Governance

The school has established an organization that facilitates shared decision-making. At present the major internal decision-making body is the School Council. In determining the membership of this council, the principal had in mind the notion of a community-oriented school. Consequently, relevant interest groups have been given a voice in the School Council.

Each member of the School Council has voting rights with a simple majority being necessary for decisions to become operative. Membership

of the Council is as follows:

1. Central administration - principal, assistant principals, head-secretary, business manager and head custodian;
2. Department heads and department chairmen;
3. Community School Coordinator;
4. Chairman, M.E. LaZerte Association of Parents; and
5. President of the Students' Union.

The various members of the School Council provide effective communication linkages which are essential if the community-orientation is to be fully developed. Each member belongs to a subsystem concerned with the overall progress of the school.

The following subsidiary School Council committees represent the main subsystems:

1. Staff Association;
2. Association of Parents;
3. Students' Union;
4. School Department Staff Meetings; and
5. Department Heads Committee.

In addition to the above, several members of the school staff belong to ad hoc committees which have been developed within the school for specific purposes, e.g. curriculum committees, community-development committees and welfare groups. Also, commitments outside the school involve many members of staff in school district curriculum committees, ATA professional development committees, and extracurricular activities. Each of these connections expands the overall communication network which can improve the effectiveness of decisions made by the School Council.

School Department Staffing Practices

The current staffing practices are described using the three following categories:

(a) Central administration;
(b) School curriculum departments (including counselling); and
(c) Community-school coordination.

Central administration. The principal, three assistant principals, business manager, head secretary and head custodian form the central administration. This administrative group heavily affects the overall conduct of the school, although the principal retains ultimate responsibility.

At the professional level the principalship team is involved in the ongoing activities concerned with the teaching staff, curriculum

development and students. However, this team feels that a disproportionate amount of its time, estimated at 60-70 percent, is spent in giving students advice on programs. This situation has resulted directly from the large range of program options available to students and the school's attempt to cater for students' needs.

The head secretary is responsible for the conduct of the school office. Most of the school's administrative detail is channeled through this office. Each member of the central office staff, besides fulfilling basic clerical duties, has developed a specific expertise, such as student services, switchboard operation, pupil accounts, or printing. As a result, a team approach has evolved.

The business manager is responsible for the day-to-day business of the school, purchasing, budget control, general accounting, and basic material welfare of the school. To assist the business manager, staff are employed to receive goods and to handle the business accounts.

With the school building in use from 8 a.m. to 11 p.m. most days, including weekends, custodial functions assume considerable importance. Cooperation and coordination are essential if this aspect of the school is to be effective. As the head custodian is a member of the School Council, communication channels are adequate to ensure that the custodial function is an integral part of the school organization.

School curriculum departments. The school has eleven departments, namely, English, Mathematics, Social Studies, Science, Physical Education, Business Education, Fine Arts, Vocational Education, Library, Counselling, and Student Activities. Each department has a department head whose responsibilities include teaching, administration, supervision, curriculum development, and evaluation. In addition to these departments, Home Economics and Modern Languages have departmental chairmen who have teaching, administrative and coordinating responsibilities. The department heads receive an allowance for their responsibilities, while the department chairmen do not.

Within each department, paid paraprofessional services are available to the teaching staff. The extent of use of these personnel depends upon the nature of the curriculum presented and the specific needs of the teachers and students.

The staff of each department has considerable autonomy and flexibility in the operation of the department. Staff usage depends upon the programs offered, the physical facilities available and the timetabling practices used. A common feature existing within each department is the high level of joint planning that occurs. This joint effort ensures that purposeful cooperation occurs in curriculum development.

Team teaching practices vary from department to department. The departments of Science, Physical Education and Home Economics emphasize the sharing of space and team teaching. English and Social Studies emphasize cooperative enterprises among teachers, while practices of the

Mathematics, Business Education and Vocational Education departments reflect the specialized nature of the programs offered.

In Table 6.5, the teachers' perceptions of their involvement in planning for the use of space and coordination of teaching-teams are presented. Over 80 percent of the respondent teachers have input into decisions about the use of space, while 65 percent are involved in coordinating for team teaching.

Table 6.5

Teachers' Perceptions of Their Extent of Involvement in Two Coordinating Activities (N=39)

Item	Considerable	Some	Little	None
Conferring with other teachers on the use of classroom space	16%	39%	26%	19%
Coordinating the instructional program for a team of teachers	14%	30%	21%	35%

Because extensive cooperation exists in each department, participative decision-making is greatly facilitated. This professional involvement of staff is consistent with the overall philosophy developed for the school which dictates the objectives to be achieved.

Generally, the use of paraprofessional and support staff within the various departments reflects need. Tasks performed by the paraprofessional and support staff involve a variety of clerical and technical-housekeeping duties. Table 6.6 presents the overall view of the responding teachers in terms of the actual and preferred extent to which paid paraprofessional and support staff perform the stated tasks.

As the data illustrate, the actual extent to which paid paraprofessionals are used varies considerably according to the type of task. For example, over 50 percent of the responding teachers involve the paraprofessional staff in considerable typing and duplicating tasks. By contrast, only 22 percent use the same staff to operate audio-visual equipment.

Consideration of the preferred extent to which the responding teachers would like to use paraprofessional and support staff indicates that the present level of services may be inadequate. For example, over

Table 6.6

Teachers' Perceptions of Actual and Preferred Extent of Involvement of Paid Paraprofessional and Support Staff in Clerical and Technical-Housekeeping Tasks

Tasks	Actual Extent				Preferred Extent			
	Considerable	Some	Little	None	Considerable	Some	Little	None
CLERICAL	%	%	%	%	%	%	%	%
Type materials for teachers	52	20	13	15	80	15	5	-
Duplicate materials for teachers	56	18	8	18	82	8	8	2
Distribute, collect & file materials	36	23	15	26	72	18	8	2
Keep attendance records	10	2	14	74	31	10	8	51
Collect money	20	10	5	65	36	13	13	38
Purchase supplies	26	28	8	38	38	26	5	31
Keep library records	49	10	8	33	54	23	2	21
Catalogue library books & materials	49	3	5	43	56	8	36	-
TECHNICAL-HOUSEKEEPING								
Prepare audio-visual materials	15	8	15	62	41	36	5	18
Keep classroom materials in order	18	5	15	62	41	10	18	31
Prepare displays	13	18	8	61	43	23	13	21
Operate audio-visual equipment	5	2	15	78	23	31	8	38
Set up equipment	13	5	13	69	36	26	10	28
Prepare science laboratory materials & maintain laboratory equipment	33	5	2	59	46	13	-	41

80 percent of the respondents would like to see support staff involved in preparing audio-visual materials as compared with the 38 percent who perceive that paraprofessional and support staff presently perform this service. These results may suggest that some tasks that teachers are conducting should be transferred to paraprofessionals, or alternatively that some tasks which teachers feel are necessary or desirable are not presently being performed by any staff members.

An analysis of the formal qualifications held by the paraprofessional and support staff at the school interviewed for this report shows a wide range of accomplishments. These qualifications are presented in Table 6.7.

Table 6.7

Academic Qualifications of the Paid Paraprofessional and Support Staff (N=14)

Qualifications	Number
Grade X plus one year of business training	2
Grade XI plus one year of business training	1
Grade XII	3
Post-Secondary: 1 year—business college	3
Post-Secondary: 2 years—college diploma	2
Post-Secondary: 3 years—B.A.	2
Post-Secondary: 4 years—B.A.	1

Specific training for the paraprofessional staff at the school has largely been "on the job," especially as the tasks performed by these staff members vary from department to department.

Even though the school has a strong community orientation, the use of adult volunteers is still quite limited. The major use of adult volunteers has been with the new programs that have been developed as these have been designed to involve parents. Unless an adult volunteer can guarantee regular attendance and participation in a program, continuity and forward planning are difficult to achieve.

Respondents to the questionnaire indicated that greater use could be made of adult volunteers. Table 6.8 shows the teachers' perceptions of the current use of adult volunteers and the extent to which they could be used in selected activities. In general, approximately

50 percent of the respondents would like to use adult volunteers for several supervisory and clerical tasks.

Table 6.8

Teachers' Perceptions of Actual and Preferred Extent of Involvement of Adult Volunteers in Supervisory and Clerical Tasks

Tasks	Actual Extent				Preferred Extent			
	Considerable	Some	Little	None	Considerable	Some	Little	None
SUPERVISORY	%	%	%	%	%	%	%	%
Supervise playground at lunch or recess	-	-	2	98	23	10	5	62
Take students on trip outside school	-	10	8	82	20	28	15	37
Supervise other lunchtime activities	-	5	10	85	28	13	10	49
CLERICAL								
Type materials for teachers	2	-	8	90	20	26	10	44
Duplicate materials for teachers	5	2	5	88	18	23	8	51
Distribute, collect and file materials	-	2	-	98	15	31	5	49

Another source of valuable assistance within the various departments is the work-experience program developed for students. Some of these students supplement the paid paraprofessional staff whose work relates directly to the practical needs of students, especially those in business and vocational education departments.

With respect to student counselling, the number of trained staff members available was considered to be inadequate. Two full-time counsellors and one half-time counsellor were located at the school. A proposal had been forwarded to the central district administration recommending a new counselling program for the school and an increase in the number of counsellors to five.

Although all teachers accept that they serve to some extent as counsellors, their time is restricted for specific counselling duties. Table 6.9 shows the extent of involvement of teachers in specific counselling tasks.

Table 6.9

Teachers' Perceptions of Their Extent of Involvement in Counselling Tasks

Task	Considerable	Some	Little	None
COUNSELLING				
Counselling students on their personal matters	15%	42%	33%	10%
Counselling students on vocational matters	22%	40%	28%	10%
Handling discipline and behavior problems	25%	35%	40%	--

Community-school coordination. This function is performed by a paraprofessional whose salary is completely paid by the Provincial Department of Recreation, Parks and Wildlife. The position of community-school coordinator is vital to the achievement of the school objective concerned with the community-school approach. Basic to this objective is the need to relate the community to the school and the school to the community.

To fulfil the function implicit in the position of community-school coordinator, several initiatives have been taken. A Parents' Association has been established to foster better understanding between the school and parents. The community-school coordinator is the executive secretary of this association.

A regular monthly newspaper, Dialogue, is produced by a committee of parents in an attempt to bring the school and community closer together. The newspaper features aspects of the school including programs, departments and teachers, and encourages feedback.

The community-school coordinator, through contact with many sections of the local community, is able to assist in assessment of the needs of that community. In turn these needs are translated into programs both for students and community.

The coordination of use of physical facilities by the community, communication with the community, development of a broad range of alternative activities for the local community, and coordination with the

professional staff of the school, illustrate the essential nature of the position of community-school coordinator. The increased use of school space, equipment and materials places an additional burden on the school's financial resources and custodial services.

An Outline of the Main Innovative Programs Developed

To identify the innovative impetus that exists within the school, a brief description of several special programs is included. The effect upon staff utilization is considered.

(1) Community-oriented Education (CORE) Program. This program is based upon the identified need for students to gain greater understanding of the local community. The development of the program involved teachers from the Social Studies and English departments, with the students being responsible for determining their specific programs. Each program involves research, interviewing, and practical community experience.

Seminars are held at regular intervals in school and in the homes of volunteer parents where experiences are shared. The students record the use of their time and are responsible for their own progress. The development of individual student initiative, trust and interaction with the general community are the expected outcomes in addition to academic achievement. Teamwork between teachers, volunteer parents and students is essential to the program's success. The CORE project director won a Hilroy Foundation award for this project: this award is given for the best new school program developed in Alberta.

(2) Canadian-oriented Education (CANOE) Program. This program is designed to acquaint students with their national heritage in both theoretical and practical ways. Research and communication skills are used to integrate Geography, Social Studies and Physical Education; classroom activities and field experiences play a major part.

The involvement of volunteer parents is essential to the program which emphasizes joint staff planning and curriculum development. School, community and municipal resources are integrated in programming to cater to student needs.

(3) Earthbound (Experimental Project). This program, which was named after a poem written by a student involved in its developmental stages, integrates several basic Grade 12 courses. Emphasis is placed upon individual student initiative. Each student is responsible for his own specific learning task but a committee of teachers, parents and students (peers) monitors the total process.

In the application for program approval the following basic objectives were detailed:

(a) to develop and field-test an alternative program;
(b) to develop cognitive and affective skills and competencies through six basic challenges; and
(c) to increase parental participation and involvement in the "Earthbound" students' educational program.

(4) Work Experience. This program provides students with experience in an actual work environment within the school or within the local community. For example, some students perform clerical tasks such as typing within the school.

A subsidiary program of Work Experience refers to Marketing Experience which attempts to relate work experience to the usual school curriculum. Students undertaking marketing experience are supervised by the marketing teacher.

(5) "Being and Becoming." This new program was developed by the department chairman of Home Economics. "Being and Becoming" is a "parenting" child-development program with emphasis upon involvement and participation. Students attend evening meetings of the local Child Development Society and assist in the preschool centre. They are assigned to a preschool child, becoming involved with the child's family for one year. The department chairman received the Hilroy Foundation award for 1976.

(6) Beauty Culture Salon. This salon provides a service to the community while at the same time students train in beauty culture. The program enables students to qualify with a certificate that is recognized in the industry.

A highly-qualified technial aide assists in the training of the students in the practical aspects of the course. The beauty salon is operated by a qualified teacher.

(7) Vocational Education. The programs offered in the Vocational Education department train students, provide a community service, and offer courses for the community. Students in this department work on actual tasks, e.g. repairing cars, building, and general shop work. Customers of this department pay for the services rendered so that the department is basically self-supporting. Further, courses are available to the community which are also based upon actual needs and not simply upon classroom activities.

Summary. These various programs illustrate the innovative nature of the school, its relationship with the community and the endeavor to bring the community into the school. Team work Is reflected throughout the program developments occurring in the school, which involve teachers, paid support staff and the community.

Nowhere is this teamwork more apparent than in the science department in which the use of team teaching, team curriculum development and planning with paraprofessional staff is most evident. In fact, if teachers are to use their professional skills to the fullest extent, support staff are necessary to undertake maintenance, clerical and preparation tasks.

ANTECEDENT FACTORS AFFECTING PRESENT STAFFING PRACTICES

The current staffing practices reflect the philosophy that has been developed for the school. The development of this philosophy with its consequent school objectives is traced in the following sections.

Initial Community School Concept

The idea to develop a community-oriented school in the district emanated from one of the senior administrators within the school system in 1969. This was accepted as a challenge by the school's principal and staff. During the years since the school was first established, the community-school approach has developed steadily. The school's principal realizes that the achievement of the ultimate goal of developing a fully-integrated community school is not possible unless pursued slowly.

In pursuing the overall objective, the attitudes of teachers, students and community have to change. Each of these groups must understand their interrelationships and interdependence. The principal has identified the needs of these three groups, emphasizing the training necessary in participative decision-making and the ever-increasing responsibility that has to be shouldered in developing a true community school.

School Planning and Building

With the notion of a community-oriented school at the heart of early planning for the physical plant, a building different from the conventional type was ensured. Even before the school was built, basic objectives were determined with independent study being considered fundamental.

The preplanning stage ensured that innovative educational practices in the school would be possible. With the inclusion of resource centres in each major subject area, a main central library, large double-size science rooms and laboratories, the clustering of rooms for each discipline, and the well-placed staff work rooms, practices such as team teaching and planning were realistically encouraged.

Construction of the administrative and guidance areas adjacent to each other provided an integrated communication centre for teachers, students and the community. Subsequent placement of the office of the community-school coordinator in this general area enhanced the effectiveness of communication.

School Philosophy

As stated previously, objectives for the school were established

before the building was completed. These objectives emanated from the decision to establish a community-oriented school. By 1972 sufficient progress had been made to enable the implementation of a clearer philosophy. To achieve this aim, two university professors were invited to assist the school staff in establishing a school philosophy. The two professors conducted a series of interviews with the staff, students and community. Their findings were submitted to a committee of teachers for endorsement: at that time the present school philosophy was formalized. Evolving from this overall school philosophy, basic school objectives have been determined. The following extract from a printed document pinpoints the underlying objective for the school:

> Each student is an individual with needs, abilities, goals, interests and responsibilities, some of which will be major factors in the planning and implementation of an individual's educational experience. The total society and the immediate community are acknowledged as components in the total educational environment. The community must be as much a part of the learning environment within the school as the school is part of the community environment.

The Development of School Governance

As indicated previously, the principal is committed to developing a form of governance for the school that reflects involvement from all concerned groups associated with the school. To achieve this, the principal has involved himself in the training of personnel to gain the skills necessary for governing the school.

Since the school opened, input from teachers, support staff, students and the community has been encouraged and reinforced. This ongoing process has had an effect upon those involved. Governance within each department involves collegial methods for decision making. Community enterprises in the school illustrate a growing awareness of the influence that can be exerted, while students generally have responded in a positive way to increased responsibility.

Another indicator of developing shared responsibility within the school is the evident respect that the paraprofessional staff have gained from the professional administrators, the teaching staff and the students. Throughout the school the paid paraprofessional personnel provide input into the decision making process, thereby influencing the overall progress of the school. Such a situation could only have occurred in a climate conducive to the full involvement of all staff in the school.

Summary

The present staffing utilization exemplifies the gradual evolution

of practices consistent with accepted policy and objectives. To achieve the current situation, commitment to the overall school philosophy by many persons associated with the school was essential. The antecedent factors relevant to existing staffing practices relate to the logical development of the community orientation of the school that influences the activities of all involved in the school.

OUTCOMES OF PRESENT STAFFING PRACTICES

In developing a community-oriented school, increased community involvement, changes in school governance, expanded program availability for students and community, and increased teacher involvement in curriculum development are expected outcomes. Although these outcomes have not been fully achieved, considerable progress has been made.

Greater control over the school's development has been given to teachers, students and the community. The result of this change has been an increasing acceptance by the staff to provide programs for the students and community based upon need.

In providing these new programs, emphasis has been placed upon the integration of curricula from different subject areas and the integration of community and school resources. The constraints of timetabling, use of space, and student group sizes to accommodate the new programs create problems with respect to school organization.

Staffing practices within the school are continually being modified. As new programs emerge, new teaching teams are created, greater reliance is placed upon resource centres, and curriculum content has to be developed involving the mastery of new skills by the teachers concerned. The subsequent evaluation of new programs also introduces specialist skills that are not readily available to all teachers.

As teachers at the school have become more involved with the professional tasks of curriculum development and evaluation, the need for supporting staff has increased. This trend is apparent in Table 6.6 as the respondents to the questionnaire indicated a strong preference for an increase in paraprofessional services.

Table 6.8 further supports the need for increased non-professional assistance for teachers through the use of adult volunteers to provide some secretarial and supervisory assistance.

Within each department, the paraprofessional staff presently employed have developed specific expertise applicable to the particular function they fulfil. The present classification of the paraprofessional staff used by the school board may be quite inadequate when the wide variety of skills and background needed to perform the services required

by this type of school is considered. As new programs develop, and the professional tasks of teachers increase in complexity, greater reliance is being placed upon paraprofessional and support staff to provide a wide range of essential clerical and technical-housekeeping functions.

An unexpected outcome has developed from the increased need for paraprofessional staff. This concerns the relationship that exists between them and the teaching staff. With teaching teams being modified frequently and a variety of curriculum innovations being introduced, responsibility for direction of the paraprofessionals has become somewhat confused.

To maintain the effective use of paraprofessionals in the school, the definition of their tasks should be clear. In addition, the responsibility for directing the work of these personnel should be clearly delineated to ensure that they are used efficiently and are not inundated with trivial tasks.

Fundamental to the development of new teaching practices and programs is the need for more flexible financial support. The financial constraints placed upon an individual school, due to the current financing arrangements used by the provincial government and the school board, restrict the flexible use of staff. As the principal has stated, the withdrawal of any specific project or program funds means the end of that particular project or program. One example relates to the special funding of the community-school coordinator.

As the school moves closer to fulfilling its community-orientation with programs diversified according to need, the constraints of finance, staffing, program acceptance and governance may impede further progress.

INFLUENCES UPON CURRENT STAFFING PRACTICES

There are several influences upon the current staffing practices in the school, but the particular project programs probably provide the major influence. The principal indicated that withdrawal of project funding would cause the termination of projects involved. As these projects, for example, community-school coordination, involve the integration of community and school resources, cooperative teaching, and joint planning, current practices would be severely restricted if finance was withdrawn.

Another influence upon current staffing practices that was cited by the principal refers to the continual increase in student numbers. This increase places pressure on the availability of space, the flexible grouping of students, and the flexibility of teacher usage.

As teaching practices in the school change to accommodate new curricula developed by staff teams, so the direction and requirements

for paraprofessional services change. With departments cooperating in curriculum development and community members becoming involved in the conduct of these innovations, the task definition for paraprofessionals becomes increasingly diffuse. Even though these tasks can be classified as clerical and technical-housekeeping, complexity increases with greater demands on time.

The classification of paraprofessional staff within the school district seems to be not totally consistent with their use at the school. As the use of paraprofessional staff increases in differentiation, the secretarial classification used for many of these personnel does not reflect the functions that they perform.

INTERPRETATIONS AND OPINIONS

Recently the school board decentralized budgeting to seven schools in its jurisdiction, including LaZerte C.H.S. School control over the budget will enable a more detailed appraisal of staffing needs to occur. An increase in counselling and guidance personnel is already under consideration. With the advent of school-based budgeting for the school, the principalship team will not be able to spend so much of its time assisting individual students with program planning. The responsibility of this team to ensure that the money available is put to its best use further supports the need for increased counselling staff within the school.

As new curricula are developed, as cooperative teaching practices increase, and as increased demands are placed on teachers' time, consideration will have to be given to more specific role definition, including some redefinitions, and to the employment of extra paraprofessional staff with training specific to the school's needs. Teaching practices will need to be considered when new staff members are engaged for the school.

To overcome the problem of increased enrolments at the school which increase pressures on the use of space, imaginative new directions will have to be taken. The constraints of specific school hours have already been considered by the principal and staff. Programs are now being developed to include weekends, evenings, and continuous periods of time: for example, some field trips cover several days.

Coupled with greater time-flexibility is the need for greater flexibility of space. A school building does not necessarily have to provide the total school environment. By moving into the community greater variety is available to teachers in providing places to conduct schooling and learning experiences. The staff has already ventured outside the school building, and with greater community involvement, courses being provided outside the school building will become more acceptable.

With increases occurring in flexible use of time, programs conducted outside the school buildings, and expertise required by teachers,

staffing practices will become even more diversified. This diversification will reinforce the need for well-trained paraprofessional staff. Departments must also retain considerable independence, but the amount of interaction among departments should increase.

SIR ALEXANDER MACKENZIE ELEMENTARY SCHOOL

(St. Albert Protestant Separate School District)

This school was selected because of its extensive utilization of parent volunteers and the number of its students involved in cross-age help programs. Prior to interviewing staff and volunteers, all filled out questionnaires and volunteers kept daily log sheets for a three-week period. Intensive interviews based on these data were conducted with a sample of teachers and volunteer parents. The principal was also interviewed on a number of occasions.

DESCRIPTION OF THE SCHOOL AND STAFFING PRACTICES

This K-6 school occupies a single-storey building constructed in 1958. The school was originally designed for Grades 1 to 10, and and one time included Grade 11. With the opening of a high school, it became an elementary-junior high school. An addition which included a large open-area was built in 1970. Since 1971 the school has enrolled only elementary pupils.

The pressure for space forced the subsequent division of the open area into regular classrooms. In all, the building contains twenty-four classrooms, a team-teaching room used for music classes, a library, gymnasium, administrative offices and staff facilities. There are also two portable Grade 1 classrooms and two portable kindergarten classrooms in the school grounds. Another kindergarten class meets in the nearby church basement. A floor plan is included (Figure 6.4).

Approximately 800 children attend this school, 700 being in Grades 1 to 6, and 100 in the kindergarten classes. More than half of the students are bused in from the surrounding residential area.

Professional Staff

The 36 professional staff members include the principal, who is a full-time administrator; the assistant principal and a guidance counsellor, both of whom spend one-third of their time in classroom instruction; a full-time librarian; a remedial teacher and two half-time resource teachers, all three of whom are funded through special government grants (their salaries are paid chiefly from the Learning Disabilities Fund grant, while materials and supplies are covered under an Educational Opportunities Fund grant); 2.5 kindergarten teachers; and 26.5 teachers for Grades 1 through 6.

The timetable is arranged so that for one period in every six days, all teachers of the same grade level have a preparation period at the same time. Teachers are encouraged to discuss instructional concerns but the initiative is left up to the individual teachers. One teacher at each grade level is an unofficial grade coordinator. This is really a titular position since the principal utilizes all staff members as liaison persons at various times.

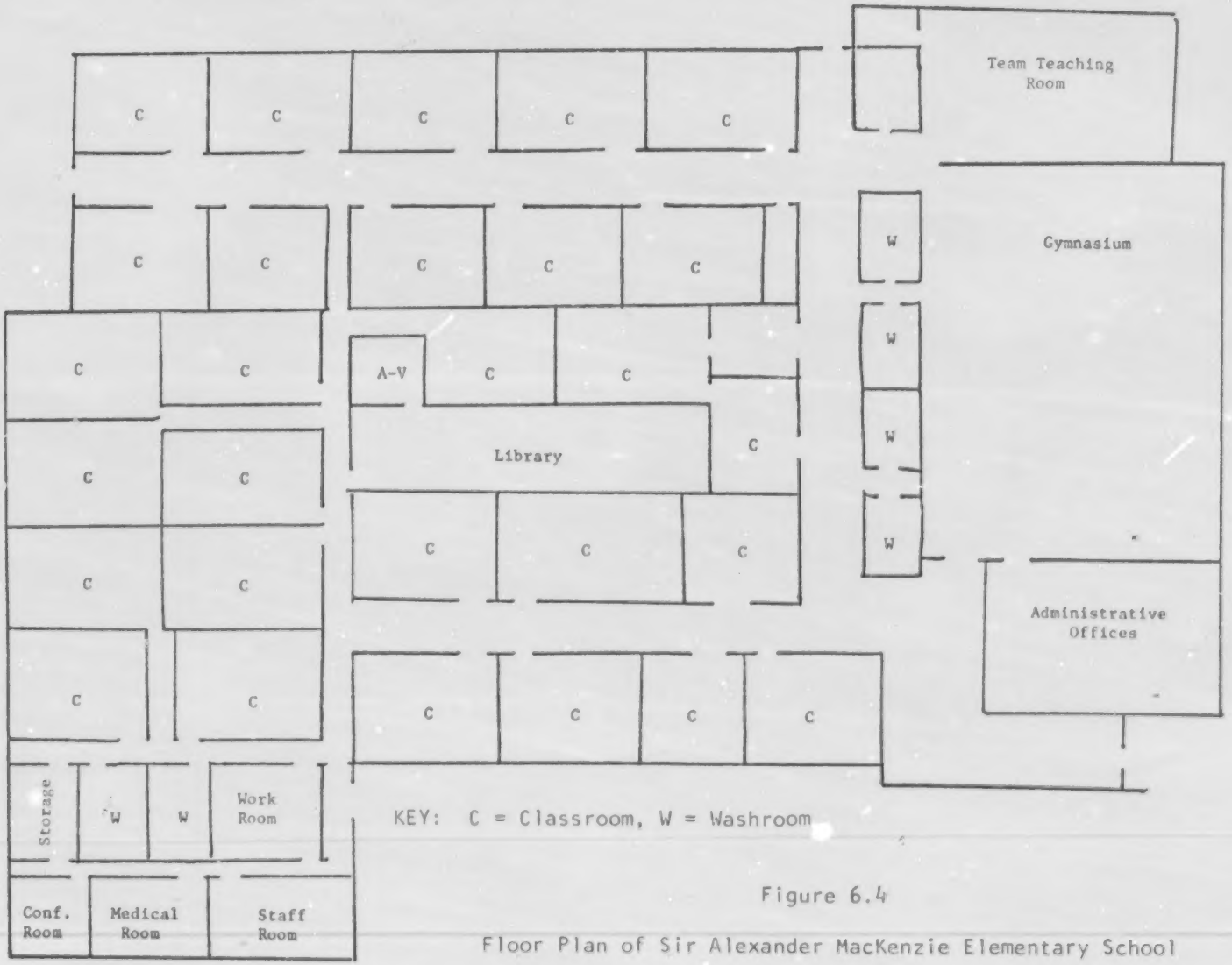

Figure 6.4

Floor Plan of Sir Alexander MacKenzie Elementary School

Paraprofessional Staff

Paraprofessional personnel involved in the school program include five school assistants; 28 parent volunteers who attend on a regular basis; approximately 45 parents who volunteer assistance for field trips, option programs and special events; seven Grade 9 students; 60 Grade 8 students; and 60 Grade 6 students.

Of the five paid school assistants, four work four hours per day and one works seven hours per day. Their chief task is to supervise children at noon hours and while waiting for and boarding buses after school. At other times, they are assigned to work in the library or in the preparation of classroom materials. Twenty-one staff members utilize the services of parent volunteers who generally work for a particular teacher one-half day per week.

ANTECEDENTS TO PRESENT PRACTICES

Adult volunteers. The principal, during his previous appointment at another elementary school in the same school district, had inaugurated a parent-volunteer program to provide assistance in the library. The program had proved beneficial both to the school and to participating parents. Therefore, when he assumed the principalship at this school, he discussed his prior experience with the staff, and with their approval advertised for parent volunteers to assist both classroom teachers and the librarian. The item in the School Bulletin for September 1972 read:

> Volunteer Parents
> We would appreciate having the services of parents to assist elementary teachers in the following ways:
> 1. assisting the classroom teacher with group work during language arts and arithmetic.
> 2. assisting the classroom teacher with objective marking during class time.
> 3. listening to students read.
> 4. supervising self-testing activities.
> 5. assisting the teacher during art activities.
> 6. assisting the librarian in numerous ways.
>
> If you are interested and could donate one morning per week of your time, please call the principal.

The response from this one memo was sufficient to fulfill teacher requests. In November 1972, as he had promised the parent volunteers, he provided them with the opportunity to "assist at a different grade level or class than the one in which you have been volunteering your time." Very few parents took advantage of this opportunity. Some felt that they

were only beginning to know their present teacher and situation, while others felt needed and didn't want to disappoint their teacher by asking to work in a different area. During the spring term, the principal called again for volunteers, especially for Grades 1 and 3, for remedial reading and to assist in the library. In all, 34 parent volunteers assisted on a regular basis during the 1972-73 school year. The program proved so successful that it was started again in September 1973 and has continued since that time.

The 1973 Fall Term marked the full implementation of the parent volunteer program. At a staff meeting, the principal and teachers had discussed possible benefits to teachers in terms of the added assistance in the library and in the opportunity for enhancing the classroom through charts and displays.

The orientation program started in September 1974 after a short introductory session in 1973 had proved successful. The sessions are usually chaired by the principal and cover topics such as the role of the parent volunteer, confidentiality, and teacher-parent relationships. These sessions have been judged by the principal and volunteers as fairly successful, but the inability of all volunteers to attend has hampered their effectiveness.

Cross-age programs. The school has both internal and external cross-age programs. The internal program involves two classes of Grade 6 students who assist in Grade 1 classrooms throughout the year. This program has been in operation for four years and is viewed as very successful.

The external programs involve students from two nearby junior high schools. In one program Grade 8 students work with Grade 3 students. This particular program has been in operation for two years. In the 1974-75 school year, fourteen Grade 8 students were paired with twenty-nine students in Grade 2. The Grade 8 students chose this program as their option course.

The other external cross-age grouping is between seven grade 9 students who assist kindergarten children in two classes. These students chose this home economics option.

Administration of the Adult Volunteer Program

The following account of the program for the 1974-75 school year was included in a report to the school board, June 1975.

> Teachers who wanted to participate in the parent volunteer program were requested at the beginning of the school year to indicate in writing to the principal those duties in which they required help.

A newsletter was then written soliciting assistance in specific areas and requesting a commitment of one morning per week from those who volunteered. After a discussion with parents as to their area of interest, they were then assigned to teachers for a further elaboration of duties to be performed. Specific details were worked out via mutual discussion between parent and teacher.

Some teachers at the beginning of the school year held meetings with parents of their students to discuss the program for the year. From this meeting they obtained volunteers to serve their needs both for short and long term assistance.

Once the program had commenced, an orientation session for all long-term volunteers was held. The role of the parent volunteer was discussed, and typical duties outlined.

The program has expanded during the last two years to a point where it permeates the entire school program. Parent volunteers are considered essential and without their talents and the thousands of hours that they contribute, various aspects of our total program would have to be curtailed.

It would be difficult to envisage our program without the assistance that we are presently receiving. Over one hundred and eighty parents have significantly assisted teachers . . . during the past year. Approximately seventy-five parents have long term commitments to the school in the way of volunteer help. This ranges from one morning each week during the school year to three mornings per week for certain parents.

Following is a list of ways in which parents have been involved during the 1974-75 school term. This list is not all encompassing but does reflect the assistance that teachers have indicated to me that they have received this year.

1. Preparing teaching materials (i.e. charts, typing stencils, constructing educational games, displays, etc.)
2. Marking objective assignments and student exercises.
3. Cutting and stamping ribbons for the track meet.

4. Cutting and pasting pictures, operating duplicating machines, laminating pictures, games, etc.
5. Posting of art work and other student work within the classroom and in hallways.
6. Researching certain topics from the library for teachers.
7. Introducing teachers to additional research people for classroom activities.
8. Assisting the teacher with individual and small group work during language arts periods.
9. Assisting students with multiplication tables and computation drill.
10. Supervising students during classroom activities.
11. Listening to students read.
12. Assisting non-English speaking students on a daily basis.
13. Serving as a resource person and guest speaker.
14. Assisting with field trips.
15. Assisting in the planning and operation of Outdoor Education Programs (i.e. serving as cooks, cabin counselor, food buyers, session leaders, etc.)
16. Assisting with special activities at the school. (i.e. option program at grade three level; Pioneer Days at grade four level; sewing costumes of Operetta, Christmas Concerts; operating concessions at track meet, etc.)
17. Assisting with fund-raising (i.e. bottle drives, rummage sales, etc.)
18. Co-ordinating and serving as group leaders for the grade two swim program.
19. Serving on the Parent Advisory Board (approximately seven monthly meetings during school term).
20. Assisting in the library in numerous ways (i.e. carding and shelving books; keeping shelves in order; typing catalogue cards, lists of materials, and book orders; processing transparencies; laminating pictures; sorting and filing cards).

During the 1975-76 school year, twenty-one teachers had at least one parent volunteer assisting them, usually one or two who came one half-day per week and four to eight others who assisted on particular occasions or for special events. The tasks which teachers assigned to their parent volunteers are shown in Table 6.10 along with the numbers of teachers and parent volunteers who were involved in each task area. In some cases one parent volunteered two half-days per week to work for two teachers. Half of the parent volunteers were directly involved

in classroom work with students, eleven prepared instructional materials, nine were assigned to clerical tasks, nine marked tests or assignments, seven put up or took down displays, and six worked in the library. In all, 28 parent volunteers assisted the teachers on a regular basis, while about 45 others provided assistance for specific events. All parent volunteers are originally assigned for a six to eight week period so that both parties may easily terminate the arrangement if difficulties arise.

Table 6.10

Parent Volunteer Tasks and Numbers of Teachers and Volunteers Involved

Task	No. of teachers assigning task	No. of volunteers assigned task
Prepare instructional materials	12	11
Assist children	10	14
Type/file/collate	10	9
Mark tests/assignments	6	9
Put up/take down displays	3	7
Working in library	1	6
Assist on field trips	4	22+
Assist with option program/special event	5	20+
Total no. of personnel involved	21	28

In 1975 approximately 20 parent volunteers assisted four Grade 2 teachers with a swimming program held at the local pool for ten hours during June. The parent volunteers were given an orientation in swimming theory and the approach to use with the children. Both land and water training sessions were included in the program which was conducted by staff at the swimming pool. Prior to the pool sessions the parent volunteers came to the school and met the children. The program proved

very successful especially in that a one-to-one adult-student ratio was possible for children fearful of the water, while a maximum ratio of one adult to four children was maintained. The program is being repeated this year.

Administration of the Cross-Age Grouping Programs

The Grade 6/Grade 1 program was initiated mainly by the Grade 1 teachers. The classes which are paired meet usually once in six days in either the Grade 6 or Grade 1 classroom. Each Grade 6 student has a "buddy" in Grade 1 for whom he (she) prepares activities and about whose progress he keeps a record. Activities include the Grade 1 student telling a story; the Grade 6 student writing it down and reading it back to his Grade 1 "buddy"; the Grade 1 student illustrating a story written by the Grade 6 student; the use of mathematic games; sight vocabulary; recognition of numbers and letters; and simple drills. The activities are usually suggested by the Grade 1 teacher.

The Grade 8/Grade 3 program is in its second year of operation. The hoped-for outcomes of the first year were not completely realized. The program demanded a great amount of planning time with the Grade 8 teacher, since the elementary teacher was the more knowledgeable about ideas for use with her students. This was difficult to achieve since they taught in different schools. The screening of junior-high students to eliminate those who felt it to be a "snap" course had not occurred. The teachers also considered that students should come more often than once a week and that they should be better prepared for their classroom work including more training in accurate record-keeping.

The present program between 60 Grade 8 and 60 Grade 3 students has been much more satisfactory. Advantages of the program include the novelty of having a non-teacher who shows interest in the child's work and progress, and the individual attention given to the child. Problems this year have been minimal.

The Grade 9 kindergarten program involves seven junior-high students and two kindergarten classes which they visit seven times during the two-month option program. Each visit lasts one hour. The project is designed to assist these students in understanding five-year-olds and in choosing appropriate activities for this age group.

The school also uses the services of junior-high school students for special events. For example, sixty junior-high students act as leaders for track-meet days. Each is assigned a group of students which they take from event to event, and for whom they are responsible.

INFLUENCES UPON PRESENT PRACTICES

The present involvement of volunteers in the school owes much to the personality of the principal and his previous experience with a similar program. The willingness of teachers to use parent volunteers for non-instructional tasks and the readiness of community members to participate in school activities are also important factors. This association of parents with the school has developed such a unique relationship between school and community that were paid teacher aides employed, the school would still actively seek the assistance of parent volunteers. The program appears to have stabilized, in that the number of teacher requests for volunteers and the number of parent volunteers are approximately equal. However, the teacher demand has been lower this year because of a number of staff changes which brought new teachers on staff at various periods during the year.

OUTCOMES

The program was initiated because it was felt to be of benefit to the students, the teachers, the school itself, and to the parents who volunteered. The hoped-for outcomes seem to have been met to the satisfaction of all concerned.

Teachers who had utilized parent volunteers commented very favorably about the program. Of the 12 teachers interviewed, only two were satisfied with their present number of volunteers, while the other teachers were anxious to request more volunteers next year and had already decided on the tasks which they would allocate to them. When asked about advantages of the program, nine mentioned the opportunity to further individualize their program and to spend time on program planning rather than on the preparation of materials. Five suggested that the materials developed and/or prepared by volunteers provided instructional matter for pupils that would otherwise not be available. With respect to students, seven teachers indicated that the presence of another interested adult was very beneficial in encouraging and supporting learning in the classroom and in providing a second point-of-view for the teacher. The opportunity to provide more immediate feedback to students through marking was also mentioned, as was the extra attention afforded children with difficulties.

Parent volunteers were also very supportive of the program. Eleven parent volunteers were interviewed. All had children in the school and saw their involvement as a way of indicating to their children the premium that they put on education. They felt that this provided a welcome opportunity to get involved in the school, and to obtain a better understanding of the teacher's role and the school program. It also allowed them to keep up their typing and office skills.

Like the teachers, parent volunteers desired that the program continue and expand, with ten of the eleven interviewed indicating their willingness to become a paid teacher aide.

The principal felt that the program had provided an avenue whereby community members were able to find out what actually took place in school, to become aware of the extent and complexity of the teacher's role, and to become more familiar with the content of the present elementary school program. It also provided an opportunity for those parents who had voiced criticisms of the school program to become involved in the school.

Problems

Parent volunteers were unable to name any problems with the program. Teachers specified few problems, but many indicated a concern to utilize the parent volunteer to the full extent of his/her competencies and also to meet the needs/interests of the parent volunteer by, where desired, balancing classroom and workroom tasks. One drawback mentioned was that the short time the parent volunteer was in the school (usually one half-day per week) prohibited continuous contact with any particular child.

Since the program began the principal has had to mediate between a teacher and a parent volunteer on only three occasions. Once the parent volunteer did inadequate work; once a personality clash occurred between the two; and once the parent volunteer was only interested in teacher reaction to her own child.

Of all the parents who volunteered only three or four stopped coming to the school during the fall term. Of these, two moved away from the community. Other reasons given usually involved other priorities, but at least one volunteer found that the tasks were more tedious than she had expected.

INTERPRETATIONS AND OPINIONS

All personnel involved were very pleased with the parent-volunteer program. With present financial constraints, any changes to a paid-teacher aide program are unlikely. A number of the parent volunteers felt that they would be interested in working as paid teacher aides, but the unionized job definition for the five school assistants presently employed precludes any in-class work, a negative factor for many parent volunteers.

While all involved in the program were generally satisfied and wished to see it continue, a number of suggestions for improvement were made.

Some parent volunteers indicated that they had sought assistance from more experienced parent volunteers, especially on problems related to their actual assignments. Due to the diffidence of some parent volunteers in approaching the administrators or the teachers, a coordinator of parent volunteers who was an "outsider" might prove to be the most empathetic contact. This more experienced volunteer would act

as a resource person for the newcomers. The principal suggested that such a person might also take over all administrative duties related to the program except for the actual selection and assignment of parent volunteers to teachers.

Since some teachers seemed to be more aware than were others of the specific competencies and interests of their parent volunteers, some attempt might be made to encourage all teachers to explore these areas more fully. In particular, some pointers about necessary outcomes of the first interview between teacher and parent volunteer might be provided.

ST. MARY'S COMMUNITY SCHOOL

(Calgary Roman Catholic Separate School District)

St. Mary's Community School is located in Southeast Calgary on the fringe of the downtown center of the city. The three school buildings surround St. Mary's Cathedral and are divided by a rail spur. The building serving Grades 7-9 students is approximately two blocks southwest of the building serving Grades 10-12 students. The building serving Grades 1-6 students is one half-block north of the junior high building and one and a half blocks west of the senior high building. Of the three buildings the junior high one is the oldest and is most in need of repair and modernization. The school district has maintained a special interest in the school since its designation in 1970 as a community school. The school was selected for inclusion in this study because of staffing practices which have been adopted since this designation. Other schools in the district also have developed strong community orientations.

The enrollment in March 1976 was as follows: Elementary School Division 185; Junior High School Division 329; Senior High School Division 1078; giving a total of 1592. These students are served by a professional staff of 88.58 FTE assigned as follows: Elementary School Division 14, Junior High School Division 22 and Senior High School Division 52.58.

St. Mary's sees itself as being a community school in two senses. First, the school is seen as a community of schools in the sense that three former schools, St. Monica's, St. Martin's and St. Mary's now operate as one school in a mutually supportive and interdependent relationship in terms of cross-school use of special-purpose space (e.g. gymnasia, shops, laboratories). The St. Mary's administrators can and do exercise discretion in allocating resources across three former schools. Prior to 1968 St. Mary's operated as a boys' high school, St. Martin's as a girls' high school, and St. Monica's as an elementary school and junior high school. This prior-to-1968 arrangement still exerts influence. In the eyes of the alumni and teachers who have been at St. Mary's since 1968, the history of the schools provides one basis for considering how well St. Mary's is defining and achieving its current purposes.

Another element of St. Mary's environment that influences its atmosphere and climate is the operation of the following system-wide programs and services within its buildings: (1) Senior High School divisions -- five work project classes (a continuation of general learning disabilities classes), and a Compensatory Education Project group of students; (2) Junior High School Division -- an intermediate

general learning disabilities class, a behavior modification class, and a class of students with various learning problems called the PEACE class; and an instructional materials center for students having hearing and vision handicaps; (3) Elementary School Division -- a learning disabilities class, a class for the reading handicapped, an early childhood class for the learning disabled, a teacher resource centre (for use of teachers in curriculum construction projects), a Fine Arts materials center (for use by groups of students, teachers and parents), and the use of Elementary Shop and Home Economics facilities by students on a transport basis from five other schools in the same school system. Even though these special activities are system-wide in nature and budgeted by central office, the teaching personnel assigned to the special activities participate to varying degrees in staff meetings and in some cases participate in extra-curricular activities. In addition these personnel contribute to the diversification and differentiation of the personnel working on the site.

Secondly, some aspects of the St. Mary's program involve the community, as do all the senior high schools in this school district. An articulate and active community advisory council, elected by parents, advises the school administrators on aspects of the school program. In addition the school extends into the community through work-experience programs (about 40 high school students), special-project programs (approximately 60 students), and work-study programs (students in the high school general learning disabilities classes). Work-experience and special-project students are regular high school students receiving high school credit for performing services under the supervision of the Work-Experience Coordinator. The difference is that work-experience students receive pay from their employer and work for a larger block of time, while the special-project students receive only high school credit. Several of the special-project students function as teacher aides in the Junior High School and Elementary School divisions. The work-study students are regularly employed for half-a-day per day and are under the supervision of teachers assigned by central office to the high school general learning disabilities program.

Another extension to the community is found in the Physical Education program where high school credit is given for community-based programs such as hockey, figure skating, basketball, track and ballet. In each case the community program is subject to the approval of the school: a supervisor or instructor of that program assumes responsibility for each student's instruction and supervision.

The extent, intent and purpose of the community activities make it difficult to draw a line around the school to separate school activities from community activities. This is made even more complex by community use of the school facilities, particularly in the gymnasium areas.

The extent of system-wide use of physical facilities and the involvement of system-wide personnel with St. Mary's School make it difficult to draw a line between personnel serving St. Mary's School and the system.

In general the coordination and cooperation of all the involved personnel and agencies seems to operate to the advantage of students at St. Mary's and students in the system as a whole. In a very real sense St. Mary's seems to operate as a school offering alternatives for many different types of students. For example, it accepts students in special classes and students who, as a result of a system-wide open enrollment policy, opt to attend St. Mary's after experiencing difficulties elsewhere.

CLASSIFICATION OF PERSONNEL

(1) The Principal has an office in the Senior High School building and serves as administrative head of the entire complex. This position is currently filled on an acting basis while the principal is on leave.

(2) Directors

(a) one director is assigned to the Senior High School Division and looks after budgeting for the total school;

(b) one director is assigned to the Senior High School Division and looks after curriculum development for the total school;

(c) one director is assigned to the Junior High School Division and looks after Physical Education and Guidance for the total school;

(d) one director is assigned to the elementary division.

The roles of the four directors are unique in that, to varying degrees, they act as classroom teachers, curriculum specialists, and building administrators. Directors receive an administrative bonus and are in a line relationship in the administrative structure.

(3) Co-ordinating Teachers are assigned to the following areas: Physical Education, Student Activity Guidance, Work Experience, Business Education, and Religious Studies. These personnel have responsibilities for planning, some budgeting, overall coordination and supervision of developments in their area of specialization. They are released from teaching for one to two periods a day and receive an allowance. In addition there is a coordinating teacher assigned to

the Junior High School Division who assists the director in the daily administration of the building. With the exception of the Junior High School Division coordinating teacher, the great majority of the coordinating teachers' efforts are devoted to the Senior High School Division.

(4) Chairmen are provided for Social Studies, Religious Studies, Mathematics, Science, and English. They are released from teaching for one period a day and do not receive an allowance. As contrasted to coordinating teachers, the chairmen are assigned more on an academic-discipline, subject-matter basis, and focus more of their attention on the Senior High School Division.

(5) Library Staff. A teacher librarian is assigned to the Senior High School Division and a library technician to the Junior High School Division.

(6) Counsellors are based in the Senior High School Division. On occasion, they also help students in the other divisions of the school. In addition the school has an assigned chaplain who is available in the school approximately 60 percent of the time.

(7) Special Education Teachers. To meet system-wide Special Education needs, the school houses the following staff: teachers for the generally learning disabled in all divisions; a behavior modification specialist; a remedial-reading specialist; a part-time specialist in vision and hearing handicaps; and teachers of children with special problems (the CEP and PEACE groups). While these special teachers function on the site of the St. Mary's complex, students who regularly attend St. Mary's have no greater access to them than have others in the system. The entry of students to those classes is through referral to the system central office and is based on a differential diagnosis by central office psychologists. However, students for whom the remediation efforts have been successful often elect to remain at St. Mary's.

(8) Teachers -- special emphasis is placed on their advisory function. While teachers have this general responsibility, advising times are also regularly scheduled for specially designated groups of students. In addition, the Senior High School Division has regularly-scheduled "seminar" periods. During these periods, students requiring tutorial assistance are encouraged to seek it.

The teaching arrangements in some subject matter areas allow students to choose between a traditional lecture/discussion approach and an individualized project-oriented approach. Both the teaching-advising aspect and the seminar periods enhance the staff curriculum-creation efforts that underlie the individualized project approach. This individualized approach is most fully implemented in Social Studies

and Physical Education. However substantial efforts are being made in the Science area, particularly in Biology.

(9) Teacher aides are employed for Senior High School and the Elementary School Divisions. The first of these aides was employed in 1970. They all perform some clerical function. However, the aides working with the following Senior High School division areas -- Social Studies, Religious Studies, Business Education, Physical Education, and Science -- fulfill a primarily clerical function (e.g. record keeping, test scoring, duplicating materials). These aides appear to be essential in both the creation of materials for and the implementation of the individualized project learning approach. The aide in social studies, while acting as a clerical aide, assists students in locating reference and textual material. The aides in Home Economics (cooking), Home Economics (textiles), Fine Arts and the Elementary School Division tend to function as instructional assistants in that they work directly, under teacher supervision, with students in the aspect of the instruction that relates to the development of skills. Some clerical and/or inventory control activities, as well as clean-up activities, are required. The library aide is primarily involved with circulation and control of books, but the aide interacts directly with students in terms of locating research materials that are germane to the student's topic of interest. A technician is employed to control, maintain, circulate and store audio-visual materials. A summary of number of hours per day of service provided by teacher aides for St. Mary's School follows:

Assigned Area of Activity	Hours/Day
Library Audio-Visual Technician	full-time (also serves other schools)
Library Aide	5 hours
Home Economics (foods)	5 hours
Home Economics (textiles)	2 hours
English Department	3 hours
Religious Studies	3 hours
Physical Education	6 hours
Fine Arts	4 hours
Business Education	3 hours
Science	5 hours
Elementary School Division	5 hours

(10) Work-Experience students in the Senior High School Division are assigned to work at various tasks in the Junior High School and Elementary School divisions. These students essentially work as teacher aides and their duties may vary from clerical and materials duplication to tutorial and small group instruction. As Senior High School students they are supervised by the work-experience coordinator. As teacher aides, they are supervised by the professional personnel to whom they are assigned. The number of students so involved varies from time to time but averages about 15. The time commitment is one hour per day.

(11) Volunteer Parent Aides are used in two organized programs, one in the Junior High School division, and one in the Elementary School division. Other uses of parent volunteers are developed on an ad hoc basis (e.g. supervision of field trips, class party chaperones). The volunteer-aides in the Junior High School Division operate a hot-lunch program for three days a week, which involves four parents at any one time. The volunteer aide program in the Elementary division is the project of a Ladies Service organization which provides assistance in the teaching of reading. It involves five aides, each for two hours per day.

(12) Police Resource Officer. The City of Calgary has formally assigned a police constable to St. Mary's School. This experienced officer operates on a consultant basis and has his focus almost wholly on prevention as opposed to detection and apprehension. In addition the officer is included in regular staff functions and in coaching of student activities. This program began in 1974.

(13) Recreation Officer. Through securing a special grant St. Mary's School has been able to employ a recreation officer whose primary function is to make available and encourage out-of-school-hours use of the school facilities by both school-age children and adults from the larger community served by St. Mary's. This program began in 1974.

(14) Business Manager. St. Mary's has a business manager who is responsible for all cash flows that result from school activities, and for purchasing or ordering the materials needed by the school. Further, he selects and evaluates all clerical personnel, including the clerically-oriented teacher aides, and he supervises the work-experience students who operate the centralized telephone switchboard. The school bus and drivers, assigned to St. Mary's School, are scheduled and supervised by the business manager. This position was created in 1974.

(15) Nurse. St. Mary's has the services of a public health nurse, assigned by the city health department. She functions in the area of health follow-up as well as preliminary diagnostic screening and

emergency care. The nurse is assigned approximately 0.75 FTE to the school complex.

(16) Special Teachers. Because a considerable number of non-English speaking students attend St. Mary's, two half-time "English-as-a-second-language" teachers (one elementary and one secondary) are employed at St. Mary's.

ANTECEDENTS OF PRESENT PRACTICES

The present staffing patterns have developed from changes introduced in 1970 with the establishment of St. Mary's School, as it is presently constituted. Since 1970, the staffing pattern has changed, especially with respect to the roles of administrators in order to facilitate the achievement of the goals of the school.

The establishment of St. Mary's Community School was a decision of the school board which outlined three purposes:

(1) the integration of three schools;

(2) the implementation of a community-school concept; and

(3) the provision of independent-study as an alternative to traditional instructional patterns.

The three schools were amalgamated to correct an imbalance of special-purpose facilities, such as gymnasia and shops. The housing of system-wide services, an aspect of the community school concept, was due, in part, to the availability of space following declining enrollments, and to the central location of the school in the school district. The other aspects of the community school concept, namely involvement of parents in the operation of the school and extension into the community, were introduced to solve the problems normally associated with inner-city schools, such as poor attendance, discipline, and the special educational needs of students from a low socio-economic environment. Attempts at solution of these problems, particularly the latter, also provided a rationale for offering independent study and traditional instruction as alternatives.

The intent to integrate three schools led to the introduction of an administrative structure in which administrators were assigned roles encompassing all three divisions of the "new" school. The currently existing administrative structure has partly resulted from the marked annual movement of administrators since 1970. The function of the earlier discussed director role varies in terms of the expertise of the personnel assigned to the directors' positions in the complex.

As the personnel designated as directors have changed each year, this reassignment has contributed to the evolution of the directors' role.

The implementation of the community-school concept has two aspects. The establishment of the community advisory council, and community use of school facilities, together with the appointment of a police resource officer, a recreation officer, and a nurse, involved the community in the operation of the school. The special-project, work-experience, and work-study programs, together with services meeting system-wide needs, are extensions of the school's activities into the community. Another instance of this extension is the granting of credit for participation in community-based sport and recreation programs.

The employment of teacher aides was primarily intended to facilitate development of the independent study aspect. These aides were selected for their clerical or technical skills, but their roles have been developed by the professional personnel to whom they were assigned. In some instances this has led to aides performing duties, related to instruction as described earlier.

Another consequence of the emphasis on individualizing instruction has been the formalization of the counselling role of teachers in the "teacher-advisor" program.

INFLUENCES ON PRESENT PRACTICES

One factor which has influenced the present staffing pattern is the support of the central office for both the community school project and the individualization of instruction. This interest has facilitated the recruitment of administrators and teachers of high quality.

The lack of understanding of the extent and manner in which non-certificated staff may interact with pupils has in part resulted in a variety of functions being performed by aides. This lack of understanding exists regardless of the detailed working of a school board Regulation (attached). Some teachers have adopted the attitude that aides would not be involved in direct interaction with pupils, other teachers have accepted supervisory activities as legitimate, while others allow aides to perform instructional tasks. Some aides are restricted to clerical or technical duties, as these are sufficient to occupy all their available time, even though teachers would like to use them in other capacities.

The role of the police resource officer has been developed by the incumbent who has held the position since its inception. One

problem was perceived to be the potential interference of the enforcement function with the counselling function. The effect of enforcing laws upon the relationship of the officer with students was minimized by communicating to students that observed breaches of the law would be acted upon but that the officer would not actively search for such infractions. Thus, the "counselling" aspect of the officer's role was given priority.

The presence in the school district of a "model school," with a heavy emphasis on individualized instruction and independent study, has influenced the development of the present staffing pattern, especially with respect to the role of aides. Strong parental opposition to an initial plan to establish St. Mary's as a "model school" resulted in a change to the plan implemented in 1970. This reduced emphasis on the individualization of instruction, compared to the emphasis in the "model school," may have reduced the number of aides employed and inhibited the implementation of an indivualized instruction strategy at St. Mary's.

OUTCOMES

The employment of teacher aides was seen as an essential prerequisite to the implementation and maintenance of an individualized study program. The extent of individualization varies with the subject area, as mentioned earlier. Thus, the intent to offer alternative instructional patterns has only been partly realized. The addition of more aides could be expected to increase the extent of individualization in these subject matter areas even if the number of teachers were reduced. However, some teachers seem to believe that their subject matter areas were inappropriate for individualized study. In such areas, therefore, the addition of teacher aides would not necessarily encourage the development of individualized programs.

The intent to integrate the three original schools has been largely unsuccessful because administrators with cross-divisional responsibilities are perceived as spending most of their time with the division in which they are based. There is, however, some sharing of special purpose facilities (e.g., gymnasia, shops, laboratories) and exchange of personnel (e.g., counsellors, Physical Education teachers).

The police resource officer has been successful in establishing a counselling function as well as acting as a resource person for teachers, but data are not available on his effect on crime rates in the school.

The pattern of administrative staffing is likely to continue,

although the cross-divisional components of the director's roles can be expected to change with changes in the incumbents. The opening of a new school, which will draw students from St. Mary's, may reduce the administrative complement and alter the administrative structure.

In the opinion of those interviewed, future budget restraints are likely to reduce the number of teacher aides employed in the school. A potential effect of this reduction is a decrease in the availability of aides. Both teachers and aides favor an expansion of the aides' role, to include supervisory and limited instructional duties.

The following major problems exist with respect to the present staffing patterns: (1) how can the existing cross-divisional functions of the roles of administrators be insured, and (2) how can the cross-divisional responsibilities of other personnel be enlarged?

CONCLUSION

The present staffing pattern has developed since 1970 in attempts to accomplish the following three objectives: (1) implement the "community of schools" concept, (2) implement the community-school approach and (3) individualize the instructional program. None of the goals implicit in these overall objectives have been fully attained. However, some successes have been documented and the process of change is still continuing. The observations and interviews at St. Mary's School have indicated that the differentiated staffing aspects of the three thrusts have contributed positively to those goals and have promise of making further contributions. The general attitude of both staff and students seems to be positive and the level of achievement of students has been improved by these endeavors.

CALGARY ROMAN CATHOLIC SEPARATE SCHOOL DISTRICT
REGULATIONS ON THE UTILIZATION OF
TEACHER ASSISTANTS IN SCHOOLS

1. The appointment and use of teacher assistants is to be the responsibility of the building principal.

2. In those instances where a teacher assistant is assigned to a teacher, that teacher will file a job description of the teacher assistant's duties with the building principal. This job description is to be available for review, on request by the Superintendent and/or the President, Alberta Teachers' Association, Local #55.

3. In the utilization of teacher assistants, both salaried and non-salaried, building principals and teachers are advised that they must retain the responsibility for the physical well being and the educational welfare of all students in their charge by carrying out or supervising the professional duties of motivating students, diagnosing their learning needs, prescribing an educational program to meet these needs, implementing the program and assessing the educational results. It is further advised that teachers and ultimately the building principal are responsible for supervising the instructional activities of teacher assistants.

4. Building principals shall not assign teacher assistants to certificated personnel without the consent of the latter and shall acquiesce with any request by a certificated member of staff to dispense with the services of his or her teacher assistant.

STRATHCONA-TWEEDSMUIR SCHOOL

Strathcona-Tweedsmuir School is a non-denominational, independent school for boys and girls in Grades 1-12. It is located eleven miles south of Calgary on a 147-acre site on the edge of rolling foothills country. The school was opened in September 1971 and provided for the continuation of two schools, one for boys and the other for girls, which had previously existed separately in Calgary.

A Board of Governors is responsible for the overall policy of the school. This body is elected by members of the School Society to which all parents of students belong.

A teaching staff of 24 serves the student population of 306. The majority of students reside in Calgary and are transported to and from school daily in a fleet of privately-owned buses.

STAFFING PRACTICES IN 1975-76

The professional staff consists of 23 full-time teachers (including the Headmaster and Assistant Headmaster) and one half-time teacher. A business manager, three secretaries and one library aide (four-fifths time) constitute the paid paraprofessional staff. Four adult volunteers provide occasional assistance, three in the Elementary School and one in the library. Six students from Grades 10,11 and 12 serve as volunteer aides in the Elementary School.

Professional service is provided in a distinctive way in two other areas. Three persons visit the school to provide instruction in music to individual students during school hours. Tuition is given in piano, guitar and violin, with the violin instructor also working as the school library aide. A consultant visits the school periodically to assist with the diagnosis and counselling of students with learning difficulties. The parents of students involved in the music and remedial program are billed by the school for the full cost of these services.

Professional Educators

Specialization. The Elementary School has six classes, one at each of the grade levels. Each of the six teachers has responsibility at one grade level. However, some degree of specialization exists. In the Elementary Division (Grades 4-6), each class receives instruction from at least two teachers in the basic academic subjects of Mathematics, Language Arts, Science, and Social Studies. Instruction in the Primary Division (Grades 1-3) is not departmentalized in this fashion. For all Grades 1-6, in addition to the above, one teacher, who also instructs in the Junior High Division, provides instruction in

Physical Education; another teacher, employed at the school on a half-time basis, gives instruction in French; while a third conducts a Choral Music program. In this report, the term "Elementary School teacher" shall refer to the six teachers responsible for Grades 1-6 and the half-time French teacher.

Extensive specialization occurs at the Grades 7-12 level with few teachers providing instruction in more than one subject. Persons other than those defined above as Elementary School teachers are described in this report as teachers of Grades 7-12.

The Headmaster. The Headmaster of the school teaches Chemistry at the Grades 10 and 11 level for 8.3 hours per week. In addition to general administrative and supervisory work at the school, he meets with the Board of Governors on two occasions each month and attends meetings of service clubs. He resides in a school-owned home located on the site.

Other positions of responsibility. A distinctive feature of the staffing pattern is that 12 of the school's 24 teachers hold designated positions of responsibility. In addition to the Headmaster, four Division Heads have been appointed: (1) Senior High, Grades 10-12 (this person also serves as Assistant Headmaster and Department Head of English); (2) Junior High, Grades 7-9; (3) Elementary, Grades 4-6; and (4) Primary, Grades 1-3. Further, eight Department Heads have responsibility for the following areas: English, Science, Mathematics, Social Studies, French, Physical Education, Library and Guidance.

Salaries. Staff salaries are determined in a manner which permits the inclusion of merit factors. New teachers are employed for a probationary year with salaries negotiated on an individual basis, though these generally conform to those paid in the large city systems. Thereafter, salaries continue to be determined individually with account being taken of positions of responsibility held, teaching skill, and involvement in extra-curricular activities. Formal evaluations of all staff are conducted periodically by the Headmaster and the Assistant Headmaster, and to a lesser extent by the persons with positions of responsibility.

Use of instructional space. The only sharing of instructional space takes place in the Elementary School, where teachers have access to an activities room and, for the school as a whole, in the single gymnasium where Physical Education teachers frequently work side-by-side.

Team teaching. Little team teaching takes place at the school. The two teachers of Grade 9 English have classes scheduled simultaneously to permit a team approach when desired. Two Physical Education teachers

employ a team approach on occasions when sharing gymnasium space. The teacher possessing special expertise in a particular area will assume the role of instructional leader for both groups of students. In 1974-75, one social studies teacher and one science teacher collaborated in the teaching of a unit on Urban Studies. Teachers have worked in teams for various Outdoor Education projects.

Curriculum and instructional planning. Joint planning for instruction is infrequent and usually takes place informally between teachers of a particular subject at a given grade level in the junior and senior high schools, and between teachers within a division (Primary or Elementary) for Grades 1-6. Joint curriculum planning is done on a more formal basis by department at the Grades 7-12 level, and by division for Grades 1-6.

Evaluation. Teachers do not engage in formal evaluation of each others' work except for summative purposes by administrators as outlined above. Some informal evaluation occurs through intervisitation at the Primary level.

Extra-curricular activities. The expectations and incentives for teachers to assume responsibility for extra-curricular activities extend beyond those found in the typical school in Alberta. The Headmaster, for example, feels that every student and every teacher should be involved in at least one such activity. Teachers supervise the activities of 50 different clubs in addition to the usual recess and noon-hour patrol and minimal supervision of bus-loading at the end of the day.

Paraprofessionals

The school employs a business manager and a secretarial staff of three. One secretary, who has been with the school from its inception, serves essentially as an administrative assistant to the Headmaster. This person reported extensive contact with students on emotional matters and participation to a considerable degree in communications with parents, teachers and the community. She is a member of two committees of the Board and has frequently interviewed prospective students and staff. The other secretaries share reception, clerical and bookkeeping activities.

A library aide is employed for four days per week. This person, who holds a professional music-teaching qualification, provides instruction in violin to individual students during school time on the other day. Her previous experience, other than in music, has been in the secretarial field. She works under the direction of the teacher-librarian, and performs a variety of activities, including explaining

to students how to use the library and reading to groups of students from the Elementary School.

Adult Volunteers

Four adult volunteers provide occasional assistance to classroom teachers. One helps the librarian and library aide, and has little contact with the students, teachers, and administrators. This person is scheduled to assist on two half-days each week but this is an informal arrangement with actual participation being irregular.

The Grade 3 teacher obtains regular assistance from one parent for up to three hours per week. This volunteer gives individual help to children who may need drill in a particular area. This person has a daughter in the class. The five other parents have provided help for this teacher in the current school year by working at home on such projects as making puppets and preparing material for bulletin boards. The Grade 1 teacher indicated that two adults had provided assistance for one half-day each week in the fall after an invitation has been issued. These persons did not come during the winter. The Grade 6 teacher plans to use adult volunteer assistance for a two-week outdoor education project in the spring.

In previous years, several parents have worked as assistants to teachers of social studies and science by maintaining files of clippings from periodicals.

Opportunities for parental assistance in extracurricular activities extend beyond the normal pattern for Alberta schools. Participation is in areas such as guest-speaking, judging at track and field meets and public-speaking contests, organizing the school fair, ski weekends, white-water canoe activities, and the annual Father-Son, Father-Daughter Trap Shoot.

Student Volunteers

Six students from Grades 10, 11 and 12 provide assistance to teachers of the Elementary School for course credit under the provisions for Special Projects. Each student is involved for an average of 3-4 hours per week. The assistance given includes mathematics drill, listening to students read, correcting homework, preparation of display work and materials for art, and escorting children to the library or physical education classes.

Other Professional Assistance

The school also differs from other schools in (1) the manner in which assistance is given to students with learning difficulties, and (2) the provision of music instruction.

Remedial teaching, guidance and counselling. The school acts essentially as a referral agency for students with learning difficulties. Students who are experiencing major difficulties with reading and mathematics are referred to a private consultant for diagnosis and remedial attention. The necessary arrangements are made by the school with parental permission, with the parents being billed for the full cost of the service. The consultant occasionally visits the school to work with students.

One teacher, with the designated responsibility of Head of Guidance, is available for general student guidance and counselling for approximately 7.5 hours per week. Additional guidance for students in Grades 7-12 is provided by classroom teachers who are each assigned 12-15 students. Communication on a once-per-month basis is encouraged under this Teacher-Advisor Program.

Music. Students in the Elementary School receive class instruction in choral music, while junior and senior choirs operate on an extra-curricular basis. A distinctive practice is the provision for private lessons during school time in piano (15 students), violin (7) and guitar (5). The involved students may either leave their regularly-scheduled class or attend during the noon-hour break. Parents are billed for the full cost of this service.

ANTECEDENTS OF PRESENT STAFFING PRACTICE

The staffing practices outlined above have been in existence since the school was established in 1971. The various influences which have had impact are discussed below.

From the outset, the Board of Governors and the Headmaster have endeavored to develop a staff whose members were compatible with the special needs of a school offering an alternative to the public school system. A high degree of commitment to the goals of the school and to a career at the school was sought. In an endeavor to achieve these objectives, applicants for the first teaching positions were required to complete a total of eighteen hours of psychological tests administered by an outside consultant. Most of the staff who were appointed in 1971 have remained with the school and hold positions of responsibility.

Staff have been hired since 1971 in response to the increasing enrollment. Their qualifications and experience have been perceived as being consistent with the school's objective of pursuing academic excellence and providing a balance of academic, physical and character-building programs. The influence of school goals on other aspects of

staffing practice is discussed in the next section.

Extensive parental involvement has been an important aspect of the school since its formation. This has arisen, not only from the nature of the school and its method of governance as outlined below, but also from need. The location of the school and the provision for a variety of extra-curricular and outdoor education programs necessitates extensive parental cooperation with transportation and supervision. Also, in the early years of the school's existence, parents assisted with secretarial and clerical duties.

INFLUENCES ON PRESENT PRACTICE

The Pursuit of Academic Excellence

Many of the staffing practices described above have their foundation in the nature and philosophy of the independent school movement and in the particular constraints which operate as far as staffing and budgeting are concerned.

The principal objective of the school, as stated in the prospectus, is:

> ... the development of mind, body and spirit to the greatest potential of the individual. This is achieved through academic, physical and character-building programs.

The prospectus identified the main thrust of the school program as being one of pursuing academic excellence.

The perceptions of the persons interviewed coincided with the above formally-stated objectives with special emphasis being given to the goals of academic excellence and university entrance. Most perceived these objectives as arising from the need felt by those establishing the school and those who presently support it to develop an alternative to the public school system.

The emphasis upon the academic nature of the school underlies the decision to refer students with major difficulties in reading and mathematics to a private consultant rather than to employ specialist teachers. Budgetary constraints and a desire to assist students who have attended the school for some time are also factors. The Board of Governors established a policy for the current school year to make ability and potential for academic success formal prerequisites for admission to the school. Performance on selected standardized tests have been used for the 1975-76 intake. Previously, any student of good

character whose family could pay the tuition fees was accepted. However, parents have always been advised that the school did not provide facilities and staff to meet the needs of students requiring remedial attention.

The Needs of Staff

The salary practices and their rationale are formally recognized in the Staff Handbook:

> The School wants to provide salaries which will attract and retain exceptional teachers and will encourage them to contribute to their full capacity as educators. The policy of the School is to stimulate and reward responsibility and performance.

The unusually high proportion of positions of responsibility (twelve for a faculty of twenty-four) had developed for the reasons stated above. The Headmaster emphasized the importance of establishing conditions for work and advancement which will provide teachers with the opportunity to establish a career at the school.

The School as a Community

The independent school tradition of extensive parental involvement and close relationships among parents, staff and students is a strong influence at Strathcona-Tweedsmuir. All parents are automatically members of the School Society which elects the Board of Governors, which is the body responsible for the overall policy of the school. Parental involvement in almost every facet of school life has been encouraged in varying degrees since the school was established.

Parental expectations underlie a number of instructional practices which set this school apart from those in the typical school system. The student-teacher ratio of 12.5 : 1, the individual attention sought through such activities as the Teacher-Advisor Program, and the extensive participation of staff in extra-curricular activities reflect these expectations.

Influence of Other Organizations

The Headmaster indicated that the policies of such bodies as the Alberta Teachers' Association, the Alberta School Trustees's Association, and the Department of Education have not influenced any

aspect of staffing practice of the kind reported in this study. In previous years, a Calgary Public School District book was used to assist in the training of adult volunteers, but members of staff now attend to all aspects of volunteer preparation. The Headmaster is studying the use of aides at Bishop Carroll High School in Calgary to determine their relevance and potential for enhancing their effectiveness at his school.

Financial Constraints

Eighty percent of the school's revenue is derived from tuition fees with the balance coming from per pupil grants from the Government of Alberta. This revenue is sufficient to maintain the present program but cannot meet the costs of providing additional instructional or paraprofessional staff such as laboratory aides. The Headmaster indicated his preference for acquiring the services of persons such as the latter providing that the staff expressed a need for them and that funds were available.

OUTCOMES

Gathering of Data

Interviews were conducted with twenty-one of the twenty-four teachers on staff, all members of the paraprofessional staff, and five of the six student volunteers. Twelve members of the teaching staff returned the questionnaires which sought opinion on the actual and preferred extent of assistance from paraprofessionals, adult and student volunteers. Information was obtained from one of the adult volunteers.

Responses used in this section of the report were drawn largely from the interviews, each of which lasted from forty-five minutes to one hour. Except where indicated, the Headmaster's responses have been separated from those of other teachers.

Professional Educators

Few teachers of Grades 7-12 commented on the existing practice of creating a relatively large number of positions of responsibility and the methods used to determine salary. However, some concern was expressed by five of the seven teachers in the Elementary School and by several others in relation to the institution of separate Primary and Elementary Divisions in the Elementary School. A single adminis-

trator for Grades 1-6 was preferred.

The original staff of the school has largely remained intact thus achieving one of the objectives of the initial hiring policy described above. However, the Junior High Division Head resigned at the end of the 1974-75 school year. The problem of creating career opportunities at the school remains a concern to the Headmaster who explained plans to raise $2.5 million which would provide, among other benefits for the school, sabbatical leave for teachers.

Another major difference between teachers of Grades 1-6 and those of Grades 7-12 is in the perceived need for reading specialists. All but one teacher of Grades 7-12 considered that the number of existing staff was adequate, whereas six of the seven Grades 1-6 teachers felt that more remedial teachers were needed. The latter group made recommendations for a full- or half-time reading specialist. Several also included the need for guidance and psychological staff. The Headmaster recognized this problem, but expressed the hope that it will pass when the more demanding entrance standards take effect.

Nine of the thirteen Grades 7-12 teachers indicated the need to make some change to the Teacher Advisor Program in which each is assigned approximately fifteen students to counsel on a regular basis. Difficulties in scheduling and lack of time were the most frequent observations. However, only two suggested that existing staff were insufficient for guidance and counselling purposes. The Headmaster suggested that this program needs more time to work effectively.

Paraprofessionals

The work of paraprofessionals currently employed was generally considered to be of high value by the teachers interviewed. All reported using the services of secretaries for an average of one hour per week or less, while only five teachers, other than the teacher-librarian, reported using the services of the library aide, again for an average of one hour per week or less.

Elementary School teachers tended to prefer the use of paraprofessionals to a greater extent than did teachers of Grades 7-12. For example, when asked to indicate a preference for the most appropriate mix of teachers and paid aides to work with a group of 100 students, most Elementary School teachers opted for three teachers and two aides whereas teachers of Grades 7-12 strongly favored four teachers and no paid aides. The responses for all teachers interviewed are shown in Table 6.11.

Table 6.11

Preferences for Mix of Teachers and Paid Aides to Work with 100 Students

Level	4 teachers 0 aides	3 teachers 2 aides	2 teachers 4 aides	1 teacher 6 aides	No Response
Elementary School	2	5*	0	0	0
Grades 7-12	11	1	0	0	1

*One teacher advocated an initial 4-0 mix with a change to 3-2 as soon as aides could be trained.

The Headmaster considered the hiring of laboratory assistants to be desirable, but he emphasized that this was contingent upon teachers expressing a need for their services and upon the availability of funds. A portion of the $2.5 million to be raised in the forthcoming effort may be made available for this purpose.

Adult Volunteers

Only six of the twenty-one teachers who were interviewed provided detailed evaluation of adult volunteers. This was partly due to lack of familiarity with their work. Those responding considered the quality of work to be "medium" to "high" although three teachers judged their reliability to be "low" and two perceived their value to be "low."

Eighteen teachers expressed their satisfaction with the extent of parental participation, with the other three expressing dissatisfaction. Two teachers indicated that the use of parent volunteers is not now actively encouraged, although parents are kept informed that the opportunity to assist is available.

Student Volunteers

The use of student volunteers at the school received strong support and approval. All but two Elementary School teachers used

superlatives to describe the work of these students. One teacher considered that some students did very well while others had shortcomings. Ten of the thirteen Grades 7-12 teachers who were interviewed spoke of the merit of the scheme in terms of the perceived value of the work and the motivational effect on the volunteers.

The questionnaire responses of the teachers revealed consistent preference for the continued involvement of student volunteers, particularly in selected aspects of the instructional process and in clerical tasks. This aspect is considered in more detail below.

Functions Which Should Be Performed by Aides

Teacher Preferences. Sixteen of the twenty-one teachers interviewed provided specific responses to a question relating to functions which aides (paraprofessionals, adult and student volunteers) should not perform. Teaching was identified by nine teachers, and supervision by six. Discipline, curriculum planning, subjective evaluation, test preparation, counselling, and contact with students were each mentioned by fewer than three teachers.

Actual work performed. The work reported by student volunteers is generally consistent with the teacher preferences expressed above, with students giving assistance in mathematics drill, listening to students read, and preparation of display work and materials. However, three of five students used the term "supervision" to describe one aspect of their duties while the other two used related terms. One perceived duties to include "teaching."

The duties of the library aide and the one adult volunteer for whom information was provided were generally consistent with the teacher preferences as tabulated above.

Preference for Increased Assistance

Teachers at all levels were evenly divided in their response to a question seeking their preference among the alternatives of an increase in numbers of paid paraprofessionals, adult volunteers and student volunteers.

Most felt that teachers should be largely freed from non-professional tasks and most considered that this would not mean a significant loss of contact with students. Responses are shown in Table 6.12.

Table 6.12

Should Teachers Be Largely Freed
from Non-professional Tasks?

Teaching Level	Teachers should be freed from non-professional tasks		Significant loss of contact with students would result	
	Yes	No	Yes	No
Elementary School	4	3	2	5
Grades 7 - 12	11	2	3	10

Summary

Increased use of paid paraprofessionals appears to be dependent upon the assessment by the Headmaster of the need expressed by teachers and on the availability of funds. The latter may be accomplished by a successful fund-raising campaign which will meet the costs of a number of benefits to the school.

The student volunteer program received strong support and approval and seems likely to be continued. The parent volunteer program, on the other hand, while its value is recognized, seems to be dependent on the interest and initiative of individual teachers rather than on a strong, school-wide effort to attract volunteers.

INTERPRETATIONS

The major difference in attitudes concerning staff utilization was found between teachers at the Elementary School and teachers of Grades 7-12. The former expressed strongly the need for remedial staff and a preference for the use of professional aides. Only one teacher at the Grades 7-12 level expressed these same needs and preferences. One interpretation of these differences lies in the disparity between

current school goals and past practice. The school goals explicitly identify the pursuit of academic excellence and, for this school year, students seeking admission were required to achieve at the sixtieth percentile on selected standardized tests. Further, the school has made clear to parents that it is not equipped to handle students needing remedial teaching. However, past practice allowed for the admission of any student of good character whose parents could meet the cost of tuition. The result has been that a number of students throughout the school have learning difficulties which require remedial attention. Teachers at the Elementary School are most sensitive to this need and are faced with the problem of coping until the effects of the more selective intake are felt.

The staffing pattern which provides for a relatively large number of positions of responsibility is generally accepted, with the single exception being the existence of two Division Heads within the Elementary School. Factors underlying the desire for a change to one Division Head might be associated with differences in the personal characteristics of the teachers in the two divisions at this level.

OPINIONS

The Effectiveness of Practices Involving Educators

Staffing practices designed to provide career opportunities for the teachers have met with some measure of success. The creation of a relatively large number of positions of responsibility and the incorporation of merit factors in salary determination helped ensure that most of the original members of staff have been retained. As noted above, the dissatisfaction with the structure in the Elementary School does not appear to be associated with the policy per se but with the personnel involved, and perhaps with the general difficulty of coordinating a Grade 1-12 school. A second assistant Headmaster responsible for the Elementary School may be a suitable alternative.

Now that the school is well established, much of the challenge and excitement associated with its introduction has passed. The Board and Headmaster may need to increase their efforts in the areas noted above, with implications for the extent to which staffing is differentiated.

The school is in a transition stage in respect to its adoption of the operative goal of academic excellence. Elementary school teachers in particular perceive an incompatibility of this goal and

the presence of a large number of students in need of remedial assistance. The extent of this problem should be determined. The school may need to provide additional assistance, either through the provision of part-time staff or of more time and in-service training for teachers in the Elementary School.

Paid Paraprofessionals

Teachers are generally satisfied with the work of paraprofessionals presently on staff. Teachers at the Elementary School tended to see a greater need for an increase here than did teachers of Grades 7-12. This may be associated with the largely non-departmentalized nature of the Elementary School and the broader range of instructional activities required of each teacher. Apart from the financial constraints at this time, the decision of the Headmaster to assess carefully the need and desire for additional paraprofessionals appears to be sound.

Adult and Student Volunteers

While individual teachers have noted the value of the work of adult volunteers, greater school-wide support exists for the student volunteers to be involved in curricular activities. Adults appear to provide invaluable service in those extra-curricular programs which have involved their participation in the past.

Summary

The school faces challenges, opportunities and constraints which are quite different to those found in most school systems in Alberta. It has developed a distinctive staffing pattern and methods for determining salaries which are generally meeting the needs of the school. There is limited use of paraprofessionals, but the use of adult volunteers and student aides is now well established.

THORNCLIFFE ELEMENTARY SCHOOL

(Edmonton Public School District)

This four-year old K-6 school with 541 pupils is situated in a newly-developed, rapidly-growing urban community. This community is recognized as "disadvantaged" jointly by the city school board, the city department of social services, the city department of parks and recreation, and the city board of health. A "disadvantaged" status allows the school to receive special staffing consideration. The physical plant consists of one self-contained classroom; five semi-self-contained classrooms; two large open-area pods; six portable classrooms; a central library-resource area; specialized French, art, and music classrooms; a gymnasium; an administrative area; and a community hall with related community facilities.

This school was chosen to be part of the study for the following reasons: (1) the presence of a teacher aide whose salary was completely provided through a project, "Increasing Effective Pupil-Teacher Contact Time," funded by an Alberta Department of Education Educational Opportunities Fund (EOF) grant; (2) the existence of adult and student volunteer programs; (3) the employment of two full-time kindergarten aides; (4) and the holding of a considerable number of school district grants to conduct research projects.

Interviews were conducted with sixteen teachers, all the paid paraprofessional staff, eight adult volunteers and the two student volunteers. Questionnaires were also completed by sixteen teachers, but not all teachers answered every question.

DESCRIPTION OF STAFFING PRACTICES

The 26 FTE professional staff consists of a principal (1.0 administration), assistant principal (0.3 administration), 18 Grade 1-6 classroom teachers, one teacher-librarian, two kindergarten teachers, one "integrated-adaptation-class" teacher, one resource-room relieving teacher, one 0.4 FTE relieving teacher, and an 0.6 FTE guidance counsellor. The paid paraprofessional staff consists of two kindergarten teacher aides, two teacher aides (1.9 FTE), and a full-time secretary.

The EOF-funded teacher aide performs clerical work for teachers and organizes the activities of a number of adult volunteers. With reduced clerical loads, teachers have more time to identify student needs and to provide appropriate programs to meet these needs. Presently eight female parents volunteer their services to the school on a regularly-scheduled basis, together totalling 20 hours per week. In addition to these adult volunteers, various other parents occasionally give their

time to the school either on an informal basis or when contacted by the school for specific purposes. Two students from a local senior high school (one in each term) worked at the school to help in the library.

Professional Staff

The principal accepts overall responsibility for the operation, administration, and supervision of the school. The assistant principal provides support in all the tasks of the principal, but is specifically responsible for supervision of the audio-visual program, extra-curricular activities, requisitioning of supplies, as well as other assigned specific tasks. He also serves on most ad hoc committees.

Classroom teachers teach all subjects with the following two general exceptions: (1) those subjects which are taught by relieving teachers, and (2) those subjects which one teacher may exchange with another. For example, one teacher prefers not to teach music so he exchanges his music instruction assignment with another teacher for science. The practice of exchanging subjects is not widespread, but where it does occur both students and staff appear to benefit. The professional staff is informally divided into two divisions -- (1) Division I, primary and (2) Division II, elementary. Within each division some teaching teams exist. Within each team, the teachers work closely for planning, grouping of students, and instruction for such subjects as Language Arts. All teachers who are not members of a teaching team cooperate to provide similar subject content and teaching methods for such subjects as Social Studies, Science, Language Arts and Mathematics. Teachers are quite involved in either teaching teams or cooperative group activities.

The two kindergarten teachers are viewed as regular members of the school staff and actively participate in all school matters.

Children who are performing at a level below that expected for children at their grade level receive some special attention in one of two major ways. First, a resource room teacher assists Grades 1-4 children whose performance is somewhat below their age-group norm: these children leave their regular classroom for twenty to thirty minutes per day for individual or small group activity. The resource room program is highly integrated with activities of the regular classrooms. When not engaged in the resource room, this teacher relieves other teachers. Secondly, the teacher of the integrated adaptation class works full-time with twelve Grades 3-6 children who are performing at least two and a half to three years below their age-group norm, but have the ability to perform at this level. These children are integrated in regular classes for most of the school day but spend up to one and a half hours per day with the integrated adaptation class teacher. This teacher also acts as a resource person for the entire professional staff of the school in such areas as giving assistance in curriculum preparation and the development of learning packages: this assistance is provided outside of regular school hours.

The three following professional staff members are employed partly as relieving teachers: (1) the resource room/relieving teacher is employed 0.5 time for the resource room and 0.5 time as a relieving teacher (her salary is partly paid by EOF); (2) the teacher-librarian/relieving teacher is 0.8 time for the library and 0.2 time relieving teacher; (3) the relieving teacher is employed 0.4 time all of which is spent as a relieving teacher. The relieving teachers are hired within the provisions of the Salary Agreement between the Alberta Teachers' Association (ATA) and the school board for the purpose of providing instruction for the difference in time between the 1400 minute teacher-week and the 1460 minute pupil-week. When functioning as relieving teachers they teach subjects about which mutual agreement has been reached. Such subjects usually include Social Studies, Art or Music. When not involved in the relieving function, two of the relieving teachers concentrate upon teaching in their area of specialization. The teacher-librarian is deeply involved in library activities, while the resource room teacher teaches Language Arts skills to groups of children from Grades 1 - 4. The relieving teacher approach is not used in the kindergarten classes.

A guidance counsellor, included in the 26.0 FTE, is employed at the school 0.6 time in referrals, individual testing, and counselling of children.

The professional staff makes use of personnel available from the school district offices and from community agencies. Subject consultants and nurses are perceived by the teachers to be available in sufficient numbers to meet the needs of the school. However, most teachers stated that there is a need for more remedial-reading teachers.

The services of system-wide pupil personnel experts are utilized. When asked whether "sufficient" or "insufficient" numbers of staff were employed in these categories, the following percentages of teachers replied "insufficient."

Reading Specialists - Remedial	67%
Reading Specialists - Diagnostic	56%
Psychologists	56%
Speech Therapists	53%
District Guidance Personnel	44%
Social Workers	43%
Nurses	22%
Subject Consultants	11%

These figures indicate that the teachers considered they particularly wanted more expert help from reading and pupil-personnel specialists, but little more from the subject specialists.

Paid Paraprofessional Staff

The paid paraprofessional staff includes two full-time kindergarten aides. Each is assigned to a kindergarten teacher to whom she is directly responsible. Ninety per cent of the time of each kindergarten aide is spent in classroom activities, while the remaining ten per cent involves work in clerical and general duties. If and when sufficient time permits, the kindergarten aides assist other classroom teachers with various classroom activities.

Two additional teacher aides are responsible to the principal. One works full-time performing such functions as clerical duties, organization and administration of the adult volunteer program, preparation of aids and visual material, and operation of audio-visual equipment. The other teacher aide is employed 0.9-time, of which 0.6-time is as a classroom teacher aide and 0.3-time as a library aide. As classroom teacher aide she works under the direction of individual teachers and performs such tasks as clerical work, supervision of playground, supervision of a classroom while the teacher is absent for short periods of time, helping individual children, helping small groups of children, and listening to children read. As a library aide, she spends time processing library orders, keeping library records, and cataloguing library materials.

The fifth paid paraprofessional is the school secretary who is responsible to the principal. She is mainly involved in clerical duties, including keeping attendance records, requisitioning supplies, and general office duties.

Persons wishing to be employed as paraprofessional staff members apply to the school district office. The principal, when obtaining a paraprofessional, contacts the personnel office and a number are sent out for interviews. Usually the principal's recommendations to the personnel office regarding the hiring of a paraprofessional are accepted. The principal assigns the duties to paraprofessionals within school board and ATA guidelines. The principal may elect to assign a paraprofessional to a professional staff member who then assumes responsibility for assigning the duties to that paraprofessional.

Adult Volunteers

Eight adult volunteers regularly take part in the school program. Four work directly with the two teacher aides performing such tasks as duplicating materials, laminating materials, making teaching aids such as flash cards and booklets, and general filing. The remaining four adult volunteers assist either in the classroom or in the library. One adult volunteer works under teacher direction with an individual student in a speech program. Another supervises educational

games as well as performing clerical work in the library. Occasionally other adults are asked to assist the school for specific purposes which are relevant to one or two classroom teachers.

The professional staff collectively decided in 1973 that adult volunteers would be used in their school. Adult volunteers were contacted through notices sent home by the school and by personal parent-teacher contact at parent-teacher meetings, conferences, or school-community activities. The principal has the responsibility of deciding upon the suitability of adult volunteers. Once they have been accepted, the EOF-funded teacher aide coordinates their training and allocates their duties. The principal emphasizes to them very clearly the ethics associated with their position.

External Student Volunteer Program

Two female senior high school students have worked under the direction of the principal and the teacher-librarian. One student worked four mornings a week, over two hours per day, from September to December. A second student worked 2.5 hours per week from January to March. She worked in the library preparing and setting up displays and audio-visual materials.

ANTECEDENTS TO PRESENT STAFFING PRACTICES

Present staffing practices are largely the result of the leadership of the principal from the beginning of the school in 1971. These practices have evolved from the philosophy of education held by the principal, the teachers, and the members of the community, and from their attempts to implement their philosophy. A school-community liaison group meets approximately three times a year to reassess the needs of the school. The school and the community believe that education in elementary school should be a continuous process towards optimum development of the whole child with equal priority in academic, emotional, social, and physical development. Children should progress at their individual rates at a level at which each experiences success. The educating of a child involves both the school and the community working together.

To implement such a philosophy there must be an adequate supply of both human and material resources. This requires that the principal, staff, community, school district personnel and the school board cooperate in a variety of ways to develop the present staffing practices. With the strong leadership of the principal, various forms of funding have become available. The "disadvantaged" status of the community enables kindergarten classes to function with fewer than the normally-

required 27 children. Early Childhood Services (ECS) grants to the school board have allowed the employment of the kindergarten aides. The EOF provides sufficient funds to hire a 0.5-time teacher and a full-time teacher aide.

In addition to these sources of funding, the staff has been and is currently involved with the following school district and EOF research projects which provide some extra funding:

1973-76	Increasing Effective Pupil-Teacher Contact Time (EOF)
1974-75	An Individualized Approach to Reading Remediation
1974-75	An Integrated Approach to Perceptual Training and Language Development
1974-75	Auditory Perception and Its Relation to General Reading Ability
1975-76	Peer Group Assistance in Order to Motivate Creative Writing
1975-76	A Multi-Disciplinary Project Involving Grades 1 and 6
1975-76	Developing Interest and Comprehension in Reading: A Motivational Approach

The following two additional projects have been submitted but not yet (May 1976) approved:

(1) Provision of an extra full-day of library activity for the teacher-librarian.

This would enable her to be a full-time librarian, rather than 0.8 librarian and 0.2 teacher, and spend the extra day in providing needed library experiences for the four kindergarten classes.

(2) Use of educational games to improve skills in Language Arts.

Members of the community have responded by volunteering to use expertise they possess such as clerical and library skills. Parents without expertise in a particular skill area are working under the guidance of a teacher or a paid paraprofessional and are providing valued services such as laminating, duplicating, and helping with small groups of children.

As a result of past experiences, the principal believes that long-range plans involving all classes and teachers, and not just the "aggressive" teacher, are essential. Further, he emphasizes that the school should be a happy place for a hard-working staff, and that the school program must include opportunities for individual initiative and development of both students and staff.

INFLUENCES UPON PRESENT PRACTICES

The most critical influence is the EOF which provides the salary of the teacher aide who coordinates many of the support activities and organizes and administers the adult-volunteer program. Other sources of funding such as the school board and Early Childhood Services, combined with the "disadvantaged" status provide additional personnel such as the kindergarten teachers, kindergarten aides, teacher aides, integrated-adaptation teacher and the relieving teachers.

The principal provides leadership and stimulation for the professional staff. He is a key person in influencing professional staff decisions. His efforts in obtaining the above-mentioned funding are critical. His encouragement of team teaching has provided opportunities for teachers to work closely together and has strengthened their professional contributions.

The professional staff cooperatively subscribes to the goal of meeting the individual needs of children. This staff endorses the present staffing practices and believes that they enhance their efforts to achieve this goal.

OUTCOMES

Expected Outcomes

Expected outcomes of the present staffing practices as outlined above are as follows: (1) an increase in the reading scores of those children entering Division II and of those entering Junior High School as determined by standardized testing; (2) noticeable improvement in oral and written language skills determined by teachers' observations; (3) an increase in individual and small group teacher-student contact time for instructional purposes; (4) a decrease of time spent by teachers on clerical and non-professional tasks such as recording marks, duplicating and preparing materials, typing, and operating audio-visual equipment; and (5) establishing a training group of volunteers to work in the school and provide liaison with the community.

Actual Outcomes

Student performance and adult-pupil contact. An increase in reading scores was evident from test results. However, the amount of increase was not as great as was anticipated. Teachers report substantial improvement in oral language skills, but written language has improved only slightly. Teachers are concerned that this latter area of written language be given more attention. Teachers reported that since the involvement of paraprofessionals and adult volunteers

in clerical and non-professional tasks, the number of reading groups has increased resulting in smaller reading groups and an increase in individualized instruction. The library is experiencing considerably-increased student usage.

Support activities. A large number of teachers reported that paraprofessionals spend considerable time performing clerical tasks such as typing and duplicating materials for teachers; distributing, collecting, and filing materials; keeping library records; and purchasing supplies. An even larger number of teachers wanted paraprofessionals to spend a considerable time on these activities. For example, sixty-seven percent of the teachers stated that paraprofessionals actually spend a "considerable" amount of their time in typing and duplicating materials for teachers, while 79 percent preferred that paraprofessionals spend "considerable" time on these tasks. For distributing, collecting and filing materials, 64 percent of the teachers stated that paraprofessionals actually spend a "considerable" amount of their time in these tasks, while 77 percent preferred that paraprofessionals spend "considerable" time on these tasks. For keeping library records the results were 54 percent and 69 percent respectively, and for purchasing supplies it was 57 percent and 69 percent respectively. However, the teachers said that because of the assistance they now receive they are able to devote more time to the instruction of pupils. Adult volunteers were perceived to be little involved in these clerical tasks, and only 25 percent of teachers preferred their "considerable" involvement.

When teachers were asked "How has the presence of paid paraprofessional staff changed the tasks that you perform?" the distribution shown in Table 6.13 was obtained. Even though this paraprofessional assistance was limited, it obviously had one of the desired effects with respect to clerical tasks, and did affect planning, emotional, instructional and supervisory tasks of the teachers to a substantial extent. Not all of these effects were reductions. For example, more use of paraprofessionals can involve the teaching staff in more planning.

One controversial area involves the use of paid paraprofessional staff in "instructional activities." Table 6.14 presents the teachers' perceptions of the actual and preferred extent of such involvement. These results indicate support for increased paraprofessional activity in supporting activities, particularly with individuals and small groups. The responses indicating that some "instructing" now occurs and is preferred by a few teachers should be interpreted with the understanding that "instructing" covers a wide variety of activities.

Table 6.13

Percentage Frequency Distribution of Teachers' Perceptions of the Extent of Change Produced by the Presence of Paraprofessionals upon Specific Task Areas

Task area	Considerably Changed	Somewhat Changed	Little Changed	Not Changed
Clerical	88%	12%	0%	0%
Planning	72	14	0	14
Emotional	67	17	0	17
Instructional	57	29	0	14
Supervisory	57	29	0	14
Technical-housekeeping	40	20	40	0
Communication	38	25	12	25
Extracurricular	14	0	29	57

Table 6.14

Percentage Frequency Distribution of Teachers' Perceptions of Actual and Preferred Extent of Involvement of Paid Paraprofessional Staff in "Instructional Activities"

	Involvement							
	Actual Extent				Preferred Extent			
Instructional Activity	Considerable	Some	Little	None	Considerable	Some	Little	None
	%	%	%	%	%	%	%	%
Help individual students	8	46	23	23	41	42	0	17
Take charge of a small group of students working on a project	8	31	23	38	36	21	36	7
Listen to students read	0	17	41	42	33	42	8	17
Read stories to students	0	8	31	62	31	31	23	15
Correct standardized tests	0	0	0	100	27	27	19	27
Teach a new skill to a small group of students	0	20	20	60	10	20	20	50
Correct teacher-constructed tests	0	0	0	100	9	27	9	55
Instruct a class during a teacher's absence	0	18	0	82	0	10	10	80
Instruct a class while the teacher is present	0	9	9	82	0	22	0	78

Adult Volunteers. A group of adult volunteers has been established who spend considerable time in performing various tasks which assist teachers.

All of the adult volunteers are mothers who have children attending the school. Only 20 per cent of these adult volunteers have children of preschool age. Their spouses are generally of the middle-management level in business. The volunteers have a varied background of experience including teaching, accounting, banking and secretarial work. All have previously worked for organizations such as department stores, insurance companies, government, or manufacturing companies. All have completed at least grade 12 and 40 per cent have some post-secondary education, but only 20 per cent have previous education relevant to the duties they are performing as adult volunteers.

All the adult volunteers stated they expected to continue to work at the school. Eighty per cent stated they believed the school was in need of their help and that they had the time to volunteer since all of their children were now in school. The adult volunteers actually spend a considerable amount of their time in helping to supervise field trips, duplicating materials, setting up and operating audio-visual equipment, and performing library and clerical tasks. Teachers generally preferred that adult volunteers be involved to a greater extent than at present in the following areas:

(1) instructional--helping individual children and listening to them read;

(2) emotional--interesting restless children in activities and talking to an upset child;

(3) supervision--supervising the playground during recess and lunch, supervising other lunchtime activities, escorting students within the school, intramural athletic activities, and extra-curricular activities.

General. The principal reported that with the presence of paraprofessionals and adult volunteers an increase had occurred in the number of field trips, staff turnover had been reduced, and the number of referrals for assistance to the school guidance counsellor, psychologists, reading specialists, and speech pathologists had increased. Most teachers favored having parents join them informally in the staffroom during recess--this allowed more teacher-parent communication to occur and better relationships to develop. However, several teachers initially had reservations concerning parents joining them informally. They felt that difficulties may arise as the presence of parents would create the following concerns:

(1) teachers would not be able to talk freely for fear of parents repeating what they heard;

(2) parents would want to discuss the progress of their children; and

(3) socializing with parents, even informally, would not allow teachers the "break" intended by the recess period.

Probability of Achieving Expected Outcomes

An increase in reading scores on test results could be expected to continue if continuing attention is paid to areas which affect reading progress such as attitudes of students and parents, oral-language ability, availability of reading materials, pupil-teacher contact time for instructional purposes, and individualized instruction.

Teachers have been able to decrease their clerical and non-professional task load. However, such tasks will always exist. As teacher aides and adult volunteers assume greater responsibility for them, teachers will have more time available for professional tasks.

Continuation of the present outcomes is dependent upon continuation of present school board research grants, Education Opportunities Fund and Early Childhood Services funding, and the status of a "disadvantaged area." Loss of any such funding will necessitate alternative funding if the present staffing practices involving paraprofessionals are to continue.

The adult volunteer program will probably continue, but changes in its scope will depend upon the availability of volunteers and of teacher aides to provide training for them. The availability of the volunteers is closely tied to social and economic factors of the community. Parents with small children at home are unlikely to volunteer their services while having to make arrangements for babysitting. If the ratio of single-parent families increases in the attendance area, the number of potential volunteers may decrease. Many parent volunteers, as they attain confidence or expertise in their services, are enticed into the working force. As financial pressures at home increase, the likelihood of adult volunteers leaving the school and finding a job increases. At best, the adult volunteer program appears to be one in which there will be a reasonably large turnover requiring continuous recruiting and training in order to maintain a viable number.

The student-volunteer program could continue if high school administrators recognize the program by offering it as an elective course. Students are rewarded by the benefits they receive from working within the elementary school, but a greater benefit such as formal course credit is necessary for the program to flourish. Other

factors such as close proximity of the schools or the availability of transportation to the elementary school, and administrative problems including timetabling, will influence accessibility of high-school students to student-volunteer programs.

The attitudes of school-board members and central-office employees concerning paraprofessional and teacher aides, decentralization of responsibilities, and flexibility in the "system" testing program have been helpful in determining present staff practices. The ATA has established acceptable ground rules concerning the use of teacher aides. No evidence has been presented which would indicate any changes in attitudes of these groups.

Cooperation of and assistance by the principal and teachers are important influences upon the continuation of the present staffing practices. These practices are likely to continue as long as teachers are convinced that they continue to benefit students. Teachers stated that they were satisfied with the present use of staff, but indicated that an increase in teacher aides and parent volunteers would generally be beneficial.

Benefits

Sixty percent of the adult volunteers felt that they enabled teachers to devote more time to professional tasks. Fifty percent stated that their presence in the school fostered better home-school relationships.

Paraprofessionals felt that they helped teachers by lessening their clerical and nonprofessional load. Classroom teacher aides stated they were additional persons to whom a child could come for help and encouragement. Their involvement in the classroom permitted formation of more groups with fewer children, thereby helping the teacher to provide more personalized instruction. As described earlier, the majority of teachers felt that the presence of paraprofessional staff had considerably changed their tasks in the clerical, planning, emotional, instructional and supervisory areas.

Problems

Only a small number of parents are prepared to or can make the necessary commitment to the school as adult volunteers. The continuous turnover is discouraging and frustrating. More paid personnel are necessary as persons receiving a salary are perceived to be more committed, reliable, and less apt to break a schedule.

Effect upon the role of teachers. Teachers are more involved with professional tasks such as planning, diagnosing, prescribing, evaluating pupil progress, and research projects than they were able to be without the assistance of volunteers. All of these tasks require working with other teachers either cooperatively or within a team. The increase in the number of groups permits more individualized instruction which allows teachers to know their students better. Greater numbers of problems are discovered resulting in an increase in referrals to the guidance counsellor and school nurse.

Teachers are involved in public relations to a greater extent because of the presence of parents in the staffroom and about the school.

Possible Expansion of the Practice

Expansion of the staffing practices depends largely upon funding and the availability of adult volunteers. A great deal of effort and input will be required to maintain the present practice as funds may be secured only on a year-to-year basis. The principal's end-of-year report is most important in influencing the school board and Department of Education that continued funds are necessary.

Potential exists within the staff to support the present practices and to make necessary improvements and adjustments. Morale is at a high level and teachers are generally quite satisfied.

There seems to be little potential for a successful external student volunteer program as most teachers presently prefer to make little or no use of them.

INTERPRETATIONS AND OPINIONS

The expressed attitudes and observed behavior of the staff seemed to be congruent. The principal, professional staff, paraprofessional staff, and adult volunteers agree that first-line instruction, diagnosing, prescribing, and pupil evaluation are tasks of the professional staff. Clerical tasks including typing, duplicating and laminating, and nonprofessional tasks such as helping with field trips, supervision of playground, and setting up audio-visual equipment are mutually-agreed tasks for paraprofessional staff and adult and student volunteers.

Casual observations may indicate that teachers and classroom aides perform very similar functions. However, upon further investigation, the observers will realize the classroom aide works under the

direction of the teacher. Classroom teacher aides are usually included in general planning sessions, but the professional teacher makes the final decisions regarding matters of curriculum, teaching methods, and evaluation of pupils.

All teachers surveyed stated that they felt additional paraprofessional staff and adult volunteers were required. When asked to choose between additional paraprofessionals and adult volunteers, all chose the paraprofessionals. The teachers were also presented with the following question:

> Assuming that a fixed amount of money is available for salaries, which of the following would you prefer to work with a group of 100 students:
>
> (a) 4 teachers and no paid aides
> (b) 3 teachers and 2 paid aides
> (c) 2 teachers and 4 paid aides
> (d) 1 teacher and 6 paid aides?

Seventy percent of teachers chose (a) and thirty percent chose (b).

Any sub-groups of staff must have clearly-defined roles, purposes, and goals, and have an effective decision-making procedure. Both the paraprofessional staff and adult volunteers at this school possessed these characteristics. The roles of key personnel, especially the EOF-funded teacher aide, are clearly defined. There seems to be an acceptable balance of energies expanded between goal achievement and organizational maintenance. The energies devoted to input seem to result in efficient output. During times of heavy workloads, the paraprofessional staff and the adult volunteers work efficiently and effectively in maintaining a high level of productivity. The paraprofessional staff were rated highly by the principal and the professional staff. The principal and staff stated that the adult volunteer program could not operate at its current high level of efficiency and effectiveness without the EOF-funded teacher aide.

WESTBROOK ELEMENTARY SCHOOL

(Edmonton Public School District)

This K-6 elementary school is situated in a middle-to-high socio-economic area on the edge of a large city. It has 450 pupils and 23 teachers, 16 of whom work entirely in the classroom. Extensive use is made of paraprofessionals, adult volunteers and student volunteers. The library forms the central part of a large open teaching area. Trust, cooperation, freedom and achievement represent the ideals of the school.

The school was selected in this study because of (1) the functions performed by the teacher-librarian, (2) extensive use of adult and student volunteers, and (3) the presence of a full-time kindergarten aide and a half-time teacher aide.

PRESENT STAFFING PRACTICES

The staffing practices are related to the school philosophy which was developed after staff deliberations. Generally speaking this philosophy is directed at fostering in each child a positive self-image and social consciousness (freedom and responsibility), and developing the fullest achievement related to his/her own potential. To help in the attainment of these aims, substantial input from and cooperation with the parents was essential, as well as careful selection and assignment of staff who could perform the necessary functions. Reassessment of the needs of both staff and students is continuous.

In order to achieve the above aims, the principal felt that teachers should be relieved of non-professional tasks, including clerical duties such as typing, making stencils, stapling, duplicating, and library maintenance. Consequently he hoped that teachers would have more time for curriculum development, counselling, extra-curricular activities, community involvement, and interaction with parents.

Staff not immediately and continually involved in regular classrooms include the principal, assistant principal (0.8 teaching special education), resource-room teacher (0.5 FTE), outdoor-education consultant and program-assistance teacher, relieving teacher, teacher-librarian, and counsellor (0.6 FTE). The consultant spends 0.5 FTE at the school, teaching outdoor education when she relieves other teachers.

In addition, the following paraprofessionals are employed: a full-time school secretary, a teacher aide (0.5 FTE), a full-time

kindergarten aide and a library secretary (0.2 FTE). None of the above paraprofessionals have undergone formal teacher education, but all possess relevant training and experience.

Kindergarten Aide. The salary of the kindergarten aide was paid by the parents ($30 per child per month) during the period 1972-1975. Since September 1975 she has been paid by the school board. Normally a full-time kindergarten aide is not provided by the board unless there is an enrolment of at least twenty-seven children. However, due to the presence of two children of special difficulty, the limit was lowered in this instance.

The present aide has undergone no formal university teacher education although she is currently studying at a university on a part-time basis. This is her first appointment as a kindergarten aide, her previous experience being mainly clerical. The perceived advantages of the job are working with small children and the convenient hours and school location. More help on a regular basis from carefully-selected adult volunteers would be of benefit.

The kindergarten teacher considers the assistance rendered by the aide to be most valuable. One result has been a considerable reduction in the supervisory tasks that she performs. The clerical and technical tasks have been reduced to a lesser extent. In the teacher's view the presence of the aide has not substantially changed the teacher's instructional, extracurricular, emotional, communication or planning tasks.

A marked difference was noted between what the kindergarten teacher and the aide perceived as desirable changes in the latter's performance of specified tasks. In particular, the aide would like a greater involvement in instructional duties and less in supervision. The teacher though would prefer increases in the aide's activity in the clerical and technical-housekeeping areas.

Adult volunteers. The extensive involvement of parents and other members of the community in the operation of the school has been welcomed. A close working relationship exists between the principal and the Executive of the School-Community Association. These close linkages were encouraged by the school administrators who felt that considerable mutual benefit would result. Parents are encouraged to treat the school as an "open house" and to visit it regularly. At the beginning of each school year, parents are sent a questionnaire asking whether they wish to become involved in the school in any of many suggested areas, e.g. library, clerical, helping at meetings, and on field trips. They are also asked if they have any suggestions as to how the needs of pupils can be met (i.e. methods, curriculum) and if they possess any skills they might share with the school. The

staff members decide on the suitability of parents who offer their services. The ethics and responsibilities of the volunteer role are clearly presented.

Involvement of adult volunteers has occurred recently in these ways:

(1) assisting with development and operation of the library;
(2) tutoring children;
(3) planning and attending field trips;
(4) conducting enrichment classes on topics about which they had specialized knowledge;
(5) assisting in some regular classes, e.g. French and Physical Education;
(6) assisting in special education class -- one parent is present for three half-days per week; and
(7) presenting talks on special topics to parents and teachers.

At any one time, about four parents spend two thirty-minute sessions per week in tutoring children whose parents were advised by the school district special referral team to obtain such tutoring assistance. These parents work under the direction of the appropriate teacher. One example of parental involvement in the planning of field trips occurred in June 1975 when some parents spent considerable time at the school before a three-day trip to Elk Island National Park. The enrichment program was organized almost entirely by the parents for one hour each Wednesday for ten weeks. Parents instructed or spoke about topics including computing science, oilfield technology, home economics (conducted in the parents' homes), snowshoeing, oral French, crafts and dancing.

At present 23 parent volunteers assist in the library on a regular basis (usually for one half-day per week), and an additional 28 do so occasionally. Seventeen parents also help with noon-hour supervision in the library. Some parents assist children in locating books and in using library materials. Further, 38 members constitute the "Friends of the Library," which acts as a pressure group in library matters.

Ten of the parents who assist in the library were interviewed and all responded that their reasons for working in the school as volunteers were to help the children as well as to understand better the problems of their own children. They work an average of 3.5 hours per week. The six who possess a degree or its equivalent have husbands engaged in professional occupations. Two volunteers have undergone formal teacher education, and a further four have had work experience related to their school tasks. Those interviewed have been working at the school for an average of 2.8 years: all but one intend to remain next year.

Student volunteers. In addition to the parent volunteers, in each term nine Grade 9 volunteers from a nearby junior high school come to the school for one afternoon a week as part of an option program. They are assigned to a specific teacher or group of teachers and perform such tasks as duplicating, art work, preparing displays on bulletin boards, and working with groups of children. The principal feels that they gain not only in skills but understand better the needs of the younger pupils. Fourteen of these Grade 9 volunteers were interviewed and all but one replied that they were there because they enjoyed working with children. Also two were curious about the teacher's job as they had parents who were teachers. Three have younger brothers or sisters in the school. On the negative side two remarked that it was their last choice option, and another said that it was a good excuse "to get out of school."

Teaching staff. To a certain extent a differentiation of teacher roles exists in the school. For example, in Grades 4, 5 and 6, particular teachers take responsibility for most of the Music, French, Science, or Physical Education teaching. In Grades 4 and 6 staff can work in teams in the large open areas. All the staff were interviewed. With regard to teaming, eight replied that they did none at all, six teamed to a limited extent, four used it all the time, three used it only for films and trips, and two for social studies. When asked if sufficient numbers of certain types of school-district personnel were available, the following opinions were obtained (Table 6.15).

Table 6.15

Numbers of Teachers Who Felt That Insufficient Numbers of Certain Types of School District Staff Were Available

Category of personnel	Number of respondents who felt that insufficient staff were available (N = 23)
Reading - remedial	20
Reading - diagnosis	19
Psychologists	10
Speech therapists	10
Guidance	9
Subject consultants	6
Social workers	6
Nurses	2

Staff were asked also whether they felt that teachers should be freed from non-professional tasks to concentrate more on purely instructional matters. Twenty replied positively, with only one negative response and two were undecided. Aspects of the present system in which they saw the need for change were more teacher aides (mentioned by 8 respondents), lower pupil-teacher ratio (4), a full-time counsellor (4), more relief time (2), more adult volunteers (1), fewer adult volunteers (1), and specialists in Physical Education, Music and French (2).

ANTECEDENTS OF PRESENT STAFFING PRACTICES

The present principal took up his position five years ago at which time there was no appreciable parent involvement in the school. He commented that it took the best part of a year to create a parent organization after extensive attempts to contact and interest parents in the school. He made it clear at the time that this was not to be a token organization, and that parents would be encouraged to suggest changes in school policy and practices which would be seriously considered by the staff.

The present librarian spent at that time only two days per week in the library and three days teaching in a classroom. She, the principal and some other staff members felt that the children could make far more valuable use of the available resources if they were encouraged to use a more methodical approach to the library. They agreed also that the librarian would be able to achieve such results if freed from a classroom teaching commitment, as well as from the more routine library tasks such as shelving, filing and laminating. Both felt that volunteer parents could make a considerable contribution in this area, particularly as some had previous experience in library work. They also perceived that this practice could provide a means of linking the parents more closely with the workings of the school.

Some three years ago with the increased expenditure on elementary schools, Educational Opportunities Fund grants became available. These were considered by the staff and parents, who decided that an application be made. The proposal was drawn up jointly with the major item being a request that the librarian become full-time. This was granted along with funds for various items of equipment, e.g., record player, listening centre, and tape recorders.

Present staffing practices stem therefore from the two broad aims of the school; namely, the growth both psychologically and academically of each pupil, and the involvement of parents and other

members of the community in the school. By the use of volunteer parents and students and the employment of paraprofessionals, the role of the teachers has become somewhat delimited, enabling more concentration upon instructional and emotional aspects with an accompanying increase in attention for each pupil. Moreover, parents are drawn into the life of the school, not only as volunteers and observers, but also in extra-curricular activities for which the staff now have more time.

INFLUENCES UPON PRESENT PRACTICES

The influences on present staffing practices in the school are many and varied. However, the major catalysts have been the principal and the librarian who believed that through development of skills in using school resources the children could achieve a greater degree of independence in their learning activities. In the past, teachers' comments were often directed toward the fact that certain children were underfunctioning, a possible cause being ineffective use of the library. However, many members of staff now express their admiration for the librarian's work and their desire to see it continue.

Parent groups are very vocal in their support of the school: as the principal commented, they are very influential. If they feel that the school is not getting what it deserves they do not hesitate to make their concern known to the school board. Their influence is not, however, limited to supporting only one school, as they would like every elementary school to possess similar resources and have continually lobbied in that respect. Their feelings with regard to the present program are amply expressed by their continued support of the volunteer-parent program and attendance at evening seminars.

The school district also exerts considerable influence on practices in the school, as it is somewhat of a demonstration school, particularly with respect to library usage and librarian functions.

At the outset, some teachers were reluctant to accept the parents into the school as volunteers. The turning point was the enrichment course run one afternoon per week last year by the parents when they offered options for the pupils and shared their skills/interests with the school.

OUTCOMES

Involvement of Educational Staff in Particular Tasks

The teaching staff were asked to respond to questions regarding

the extent to which they themselves are involved in certain tasks. In each case the categories were "Considerable," "Some," "Little," or "None." Fifty percent or more of the teachers responded that they had considerable involvement in teaching a regular-size group of students, correcting assignments, preparing lesson plans, handling discipline and behavior problems, locating and assembling instructional material, assembling a file of curriculum materials, conducting "housekeeping" chores, keeping records on student progress, bookkeeping, making out grade reports, and holding parent-teacher conferences. Despite the presence in the school of paraprofessionals, adult and student volunteers, some non-professional tasks such as keeping records on students, typing or duplicating, housekeeping and bookkeeping, still take a substantial amount of the teachers' time. The responses also revealed that, in general, teachers do not devote a substantial amount of time in interaction with each other regarding curriculum development, planning, coordinating, advising, etc.

Involvement of Paraprofessionals and Volunteers in Particular Tasks

Staff were also questioned about the extent to which paid paraprofessionals, adult and student volunteers are involved in certain tasks at present and the level of involvement they would prefer. The relevant results are discussed below.

Instructional. In this area the actual level of involvement of all three groups was perceived by the teachers as low, and in only one case, "help individual students," did more than 40 percent of staff feel that a group (adult volunteers) was involved to some or a considerable extent. In every category student volunteers were thought to be the least involved.

The teachers expressed a preference for an increase in the extent of involvement of all three groups in all instructional tasks except the following:

Teach a new skill to a small group of students;
Instruct a class during a teacher's absence;
Instruct a class while the teacher is present; and
Correct tests and examinations.

Emotional. This section showed a consistent pattern of responses from staff for both the actual extent and the preferred extent. For each item the highest percentage chose paraprofessionals, followed by the adult volunteers, and lastly the student volunteers. For example, the change from actual to preferred extent ("considerable" and "some") for "interest a restless student in activities" was 18 percent to 56 percent for paraprofessionals, 15 percent to 52 percent

for adult volunteers, and 5 percent to 25 percent for student volunteers.

Supervisory. In this area the staff expressed the desire for an increase in the involvement of adult volunteers over paid paraprofessionals. The major exception was concerning "supervise class for a few minutes during a teacher's absence"; in that case 22 percent expressed the preference that paraprofessionals perform this to a considerable extent compared with none for the adult volunteers. Seventy-nine percent and 69 percent preferred adult volunteers to "supervise the playground at recess or lunchtime" and "supervise other lunchtime activities," as compared with 26 percent and 42 percent who felt they already did. Most of the teachers preferred that student volunteers have little supervisory responsibilities except in escorting students within the school.

Clerical. In every category of clerical activities, teachers felt that paraprofessionals were and should be considerably involved. They did, however, wish for even greater involvement: for example, whereas 48 percent, 52 percent and 26 percent of the teachers perceived that the paraprofessionals were already considerably involved in typing, duplicating and collecting money respectively, 70 percent, 78 percent and 61 percent preferred considerable involvement of paraprofessionals in these activities. Similarly, the staff preferred that both adult volunteers and student volunteers undertake most of the clerical tasks to an even greater extent than they do at present.

Technical-housekeeping. The teachers preferred that paraprofessionals, adult volunteers and student volunteers all undertake technical-housekeeping tasks such as "prepare displays," "set up equipment," and "keep classroom materials in order" to a considerably greater extent than they do at present.

Communication. The teachers rated this category of tasks which included "provide information to teachers about individual students" and "interpret the school to the community," the lowest of any with respect to their preferred level of involvement for paraprofessionals, adult volunteers and student volunteers. Again the preferred levels showed increases over the perceived actual levels for all three categories of personnel for nearly all tasks.

Planning. Teachers preferred much greater involvement by adult volunteers in the two listed planning tasks, namely "contribute ideas at sessions for planning for classes" and "contribute ideas for activities other than classes (field trips)." As could be expected, little involvement of student volunteers occurred or was desired.

PROBLEMS AND BENEFITS OF THE PRESENT STAFFING PRACTICES

Three major benefits have resulted. Pupils have had the opportunity to engage in more purposeful learning as a result of being exposed to new skills. Staff have been relieved of many routine tasks and have at their disposal more clerical assistance than previously. They have also had more time which could be devoted either to instructional matters or to closer cooperation with their fellows. This has led to more attention to children. Close links have been forged with the community which did not previously exist: these are now a great source of support for the school.

The major problem identified by the principal was one of apprehension, both on the part of parents and staff. The former were afraid of the school and felt it to be something with which they could not and should not closely relate. Moreover, staff felt threatened about the possibility of having parents in the school. These concerns were largely alleviated as soon as parents began to enter the school freely. Other problems related to the volunteers disappeared once they were in the school. Many staff members were concerned about the amount of preparation time required before they came in, and the principal commented on the difficulties of using several adult volunteers on the same task, particularly near Christmas.

When asked about the extent of parent involvement in the school, 48 percent of the teachers replied that they were "very satisfied" and the remainder that they were "satisfied." None expressed general dissatisfaction with the overall program although this had been alluded to in earlier responses. The principal feels that the extent of parent involvement is very good, and that the general reaction of the community to the school is highly satisfactory.

A greater lack of consensus occurred in feelings with regard to the volunteer student program. Only 15 percent of teachers had no serious objections, with a further 20 percent stating that generalizations were difficult because of the great variation in the calibre of the volunteers. The program was perceived to have little benefit either for the school or the student by 21 percent of the teachers.

With respect to paraprofessionals, 74 percent of the teachers responded that their tasks had been changed due to their involvement, particularly in the performance of clerical duties.

When asked what functions paraprofessionals, adult and student volunteers should not perform, all the staff mentioned instruction or teaching, with planning, evaluation, and discipline also being prominent.

The paraprofessionals commented that too few teacher aides were

employed, and in particular that 40 minutes per teacher per week of aide time was grossly insufficient. Their pay was thought to be inadequate, and some concern was expressed about the lack of exact definition of the aides' role in a school. The work itself was perceived to be very satisfactory and the hours most convenient.

All parent volunteers have found the experience most stimulating and look forward to it each week. Many expressed the desire to remain involved even when their children leave the school. They feel they are used as fully as possible at present. All expressed praise for the work of the principal and the librarian, and were concerned about what will happen when the principal retires this year.

Of the three groups, the volunteer students expressed the most dissatisfaction with their activities. Eight of the thirteen would like more opportunity to work directly with children, and two were concerned that they only seemed to be given "busy" work.

INTERPRETATIONS AND OPINIONS

The staffing practices adopted at the school would seem to be very successful for all concerned. The principal, parents, and volunteers had few complaints. Some teachers were, however, more critical of some aspects in interviews than they were in the questionnaires: in particular, some doubted the worth of the student volunteer program, and the need for as many volunteer parents to be involved.

Nevertheless, the librarian and staff have been to a large extent freed from non-professional tasks and have the opportunity to concentrate on matters more closely related to instruction. This does not mean that they are totally satisfied as the need for changes was often expressed. These changes, which possibly will be effected because of the high degree of staff participation, relate to paraprofessionals becoming more involved in classrooms, adult volunteers more in the area of supervision, and students more in the clerical and technical-housekeeping areas.

The fact that they are used mainly on menial tasks, i.e., those that staff dislike more, does not appear to have dulled the enthusiasm of these people, except in the case of some students. The fact that parents are very readily accepted by the staff and use the staff room freely has been a major factor in their level of satisfaction. There are, of course, legal constraints to be borne in mind regarding the use of non-certificated personnel in schools, so the above is not designed to suggest that they would be limited to their present role were the situation different. In fact, with the present staff, more volunteers and paraprofessionals would probably be readily welcomed into the classroom under teacher supervision.

The major conclusion of this survey must be that this is a unique school in many respects. A school in a more disadvantaged area probably could not successfully operate an identical program. Because many mothers of children in this school are not on the whole required to work, a considerable number of parents have more free time in the evenings and at weekends to become involved in the school. With their background they are also more likely to have higher expectations for their children and therefore wish to become more involved with the school.

WINSTON CHURCHILL HIGH SCHOOL

(Lethbridge Public School District)

The program of the school is designed to meet the individual needs of students. It is characterized by one-to-one relationships and small group activities designed to encourage initiative, responsibility and independence among students and teachers.

At the time of the study the school had an enrollment of 629 students: the approximate grade enrolments were 208 in Grade 10, 200 in Grade 11 and 221 in Grade 12. Under the existing staffing practice students do not have home room classes. Therefore the exact number of students for each grade level could not be ascertained because some students were working across grades to fulfill the needs of their programs.

The professional staff totals 31 persons with a full-time equivalent of 29.5. These staff members are assigned to one or more departments or areas of Language and Media, Mathematics and Science, Social Studies and Fine Arts, Applied Arts, Business Education, Counselling and Administration.

The thirteen paid paraprofessional staff members are all employed on a full-time basis. These include a business manager, two clerical-administrative aides, three clerical-learning centre aides, 1.5 FTE library aides, a laboratory aide and 3.5 FTE general aides. An additional six paid student aides were used on a part-time basis.

DESCRIPTION OF STAFFING PRACTICES

An organizational chart devised to show the relationships among the various categories of personnel within the school is shown in Figure 6.5. Formal relationships among staff are shown by solid lines: less formal consultative relationships appear as broken lines. An elaboration follows on the three major categories of personnel, namely, the professional staff, the paraprofessional staff, and the student aides.

Professional Staff

The professional staff of the school consists of the following personnel: principal, vice-principal, counsellor, coordinator of advisors, librarian, four department heads and twenty-one teachers. Both the principal and vice-principal are full-time administrators. The counsellor and librarian have full-time responsibilities within their respective areas. The counsellor serves as an advisor for all students and teachers, while the librarian advises teachers on available materials in the library and has general responsibility for that area. The coordinator of advisors has a unique function which has developed out of the individualized program being offered at the school. His responsibilities include the monitoring of progress made by all students, the maintenance of close contact with all advisors, the registration of

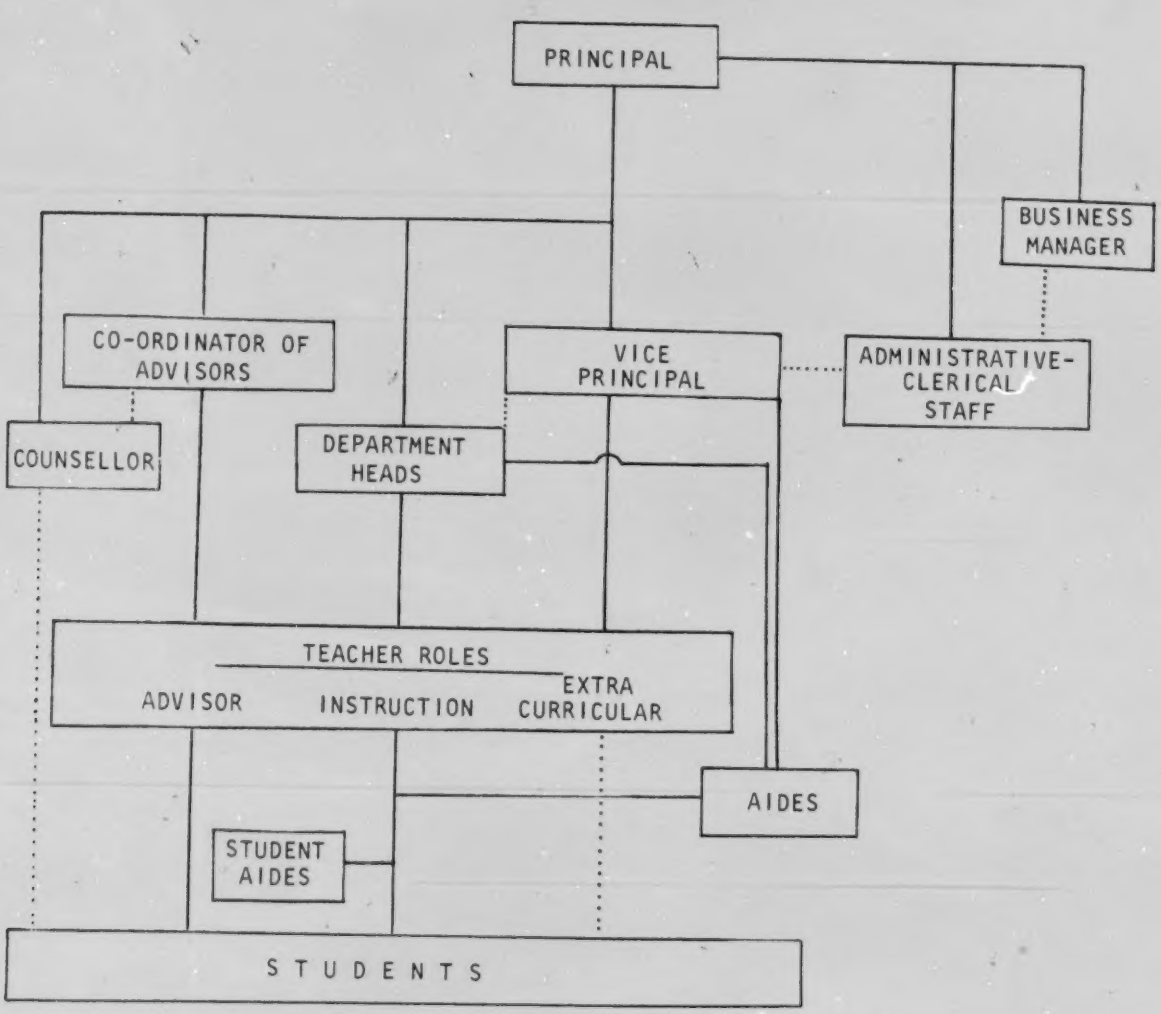

Figure 6.5

Organizational Chart for Winston Churchill High School

students who transfer into the school, and the identification and resolution of problems associated with the school's individualized program. Department heads have three main areas of responsibility. They coordinate the program, supervise personnel and facilitate communications within their departments.

The structure of the school with its learning centres and timetabling allows the instructional staff in each department to meet as a group for curriculum development. Careful timetabling ensures that teachers within the same department have common time free from instructional duties. The likelihood that they will all be in their subject learning centres during this available time facilitates interaction among teachers in related subject-matter fields.

Planning for instruction is carried out on an individual rather than on a team basis. Very little team teaching is done although some coordination of programs occurs in several related areas such as Art and Industrial Arts, and Chemistry and Biology. The department heads expressed a belief that style and method of instruction in the classroom is best determined by the individual teacher. They stated that they do not intervene in classroom affairs unless serious problems arise.

Most teachers expressed a desire to be freed from the non-instructional duties which are associated with their instructional role. They did not seem to mind the non-instructional duties associated with their advisor and extra-curricular roles, provided that they were not given an excessive number of students or a heavy marking load in their subject area. Under the present arrangement the use of aides allows them to concentrate on student needs.

Staff members identified several sources which they used when needing information related to their courses. Sources identified within the school were the principal, department heads and fellow teachers. External sources of assistance were central office consultants and the director of curriculum, regional office personnel, University of Lethbridge staff members, ATA subject councils, and colleagues at other high schools.

Paraprofessional Staff

The paraprofessionals in this district are hired by the Director of Personnel or, in his absence, the Secretary-Treasurer, according to school board policy governing paraprofessional employees. At present, the Vice-Principal interviews, nominates and oversees most of the paraprofessional staff. On appointment, aides are given an initial orientation session and on-the-job training in specific tasks.

Three paraprofessionals are employed within the administrative offices of the school: a business manager who is responsible for purchasing supplies, budgeting and accounting for the school; and two clerical-administrative aides, one of whom serves as the school secretary and the other as the school's receptionist. The secretary is mainly

responsible for typing and duplicating material for the administrative staff while the receptionist is responsible for attending to incoming telephone calls, for receiving and directing visitors and for some administrative typing. These three individuals are directly responsible to the principal.

The remaining paraprofessionals work in various areas of the school and their efforts are coordinated by the vice-principal who has the primary responsibility for these paraprofessional staff. Three clerical learning-centre aides work in separate subject area learning centres performing similar tasks. These tasks include typing, filing, distribution of materials and supervision of the learning centre. The laboratory aide works primarily in the biology and chemistry classrooms. She prepares experimental equipment, assists students with their experiments, marks objective tests, records attendance and performs general clean-up duties. The media aide does his preparation or helps others with their media projects in a media facility. He sets up film projectors, videotapes various programs, prepares slide presentations and arranges displays throughout the school. The library aide is responsible for typing, filing, and general supervision of the library in close coordination with the teacher librarian.

The general aides have duties which are often performed in more than one location and in more than one subject matter field. Their responsibilities include supervising the testing centre, operating various machines in the printing services room, and in one case working part-time as an art room aide. The cafeteria aide is responsible for the preparation of meals and is assisted by several paid student aides.

Once assigned to the various work areas, all aides, with the exception of the clerical-administrative aides, are directly responsible to the department heads of their areas and indirectly responsible to the teachers. These aides are employed for a ten-month period while the clerical-administrative aides work the full twelve months. All aides work approximately thirty-six hours a week.

Aides are given job descriptions to guide them in fulfilling their responsibilities. They are not required or expected to be used in the instructional process. The aides generally agreed that their work was clearly defined and that they were not being asked to perform tasks outside their expectations. One exception to this generalization was associated with the supervisory role that some aides were called upon to perform. The supervisory role is written into their job descriptions as part of the district policy on aides. However, it is understood that the aides who supervise students may not discipline those whose behavior seems to be outside the accepted norms of the school. This may be the source of the problem voiced by some aides who expressed a wish to be involved in neither supervising nor disciplining students.

Most aides work in a specific area within the school. However,

the media aide is assigned duties by the principal, department heads, teachers and sometimes students. These assignments occasionally cause him to work in other areas of the school. Despite the demands made on him by many people, the media aide expressed satisfaction with his work which includes the supervision of an extracurricular photography club. The Language-Media department head is responsible for assigning tasks to the media aide and for coordination of the media centre.

Aides are not generally expected to work overtime except when extra assistance is needed at the beginning or end of a semester. Provision is available for overtime pay, but most aides have not made use of it. The aides claimed that any extra time was repaid when they wished to be released for an appointment during working hours.

Student Aides

Student aides were employed by the school to assist with the implementation of the business education, physical education, and industrial arts programs and with the operation of the library and the cafeteria. Student aides generally worked from two to three hours per day, five days a week, earning $2.50 per hour for their services. Most of the students recruited for these duties were from Grade 12 and their services were rendered in addition to their regular program of school work. The student aides at the school were paid out of school revenues and not out of any special Department of Education project fund. No school credits were given for this type of service. All of the student aides interviewed stated that their responsibilities did not interfere with their course work.

Student aides performed a variety of functions. The library aides were responsible for supervising the reference-book room, keeping reference-books in order, signing out materials, helping students search for information, and sometimes assisting students with subject work. The business teacher considered the student aide assigned to her to be invaluable. The student aide did typing and filing for the teacher, and corrected and recorded achievement on typing exercises. The student aide assigned to the industrial arts area had primary responsibility for the maintenance of tools and machinery, minor construction work and distribution of materials to students. The student aides assigned to the cafeteria helped with meal distribution, money collection, and cleaning. As mentioned earlier, their work was closely coordinated with that of the full-time cafeteria aide.

Most of the student aides enjoyed the added responsibilities, but the routine nature of their work sometimes produced boredom. Other concerns expressed by some of the student aides related to their dislike of having to discipline fellow students and being perceived by their peers as a maker and enforcer of rules.

ANTECEDENTS OF PRESENT PRACTICES

The Winston Churchill High School was established in 1960 to serve the students on the north side of the City of Lethbridge. The first principal of the school was R. Turner. His educational philosophy emphasized a humanist approach and a need for student-centred education and he worked toward this goal by implementing a number of procedures that were to become the rudiments of the existing individualized student-centred program at the new Winston Churchill High School. Significant innovations he introduced were: the use of Bloom's Taxonomy by teachers for setting instructional objectives for students, the use of P.A.C.T. which is Planning and Conference Time, and the abolition of corporal punishment and "home-room" teachers.

In 1967 the Winston Churchill High School moved to a new building. The new location was not far from the original school site and so the school continued to serve the same area of the city where very few professional families lived. A noteworthy feature associated with the new school was the teacher involvement in planning it. The willingness of the school's professional staff to test new ideas continued and as a result several major changes were forthcoming during the remainder of the decade. Winston Churchill was the first in Alberta to operate the Divided School Year Plan, which was basically a semester system incorporating unequal terms, and to develop its own approved matriculation examinations. In 1968 the school took another innovative step by introducing the beginnings of its present teacher aide program. By 1970 the early examples of learning package units were being developed on a small scale specifically by the school's Department of Social Studies.

In 1971, W.Terriff became principal of the school. The school administration and teachers continued the move toward more individualized instruction and in March of 1973 their combined efforts resulted in School Board approval of a plan for Winston Churchill to develop a new individualized learning program. Several events had transpired in the period prior to the Board's decision. In 1971 the school had two vice-principals and five department heads. In 1972 this arrangement was changed to one vice-principal and six department heads. Soon after the Board's approval of the plan to individualize the program (circa 1974) the administrative structure was once again altered. J. Anderson was appointed principal and had for administrative assistance the support of three vice-principals (Curriculum, Personnel, Extra-curricular activities) but no department heads. The use of three vice-principals was largely to facilitate the major emphasis on curriculum building being embarked upon by the school.

One of the most significant influences on the school during the period of restructuring, was the Bishop Carroll School in Calgary. Bishop Carroll School, a unique institution in Alberta and one designed

to provide a high degree of individualized instruction, served as a model for the administration and staff. Most staff members were able to visit and study Bishop Carroll School in operation. Several basic differences in the Lethbridge situation made it apparent that the Winston Churchill School could not adopt the Bishop Carroll approach in total. There was no special funding available for the program, and no provision for the extensive use of instructional aides. Moreover, the design of the school, although more flexible than conventional school plans, created its own limitations. At the Bishop Carroll School, teachers who also acted as advisors to students had their offices physically removed from the students' learning centre. This isolation of the teacher from the students was not only physically impractical but was considered undesirable by the teachers at the Winston Churchill School.

The objectives-based program of individualized learning described in this report was implemented at Winston Churchill in the fall of 1974. Complementing this move were further adjustments in the staff. Since the number of teachers employed had declined because of natural attrition, a decision was made not to hire replacements but to make a corresponding increase in the number of paid paraprofessionals. The exchange of aides for teachers seems to have been a reflection of the preferences of the school's administrative staff rather than any system-wide board policy on staff composition. The board was prepared to endorse all applicants recommended by the school's administrators.

The organization experienced some difficulties in the initial phases of the plan to introduce objective-based education. The turmoil associated with the change created considerable instability for students and staff. The teacher role was redefined to include three major components: instruction, sponsoring extra-curricular activities, and advising students regarding their programs. There was some conflict of opinion and concern expressed over the exact nature of the latter role. In addition most teachers experienced difficulty in finding time to carry out properly the responsibilities associated with the advisor function as well as those associated with instruction and the supervision of extra-curricular activities.

In 1975 G. Wigg, a former vice-principal, was appointed principal. Some of the operational problems of the previous semester necessitated change in the operation of the school. A further change in the administrative structure was introduced. Because some administrative personnel were leaving to take other positions, a reshuffling of administrative staff was possible. This change involved a reversion to one vice-principal instead of three, and the creation of the position of coordinator of advisors. In addition four department head positions were established and appointments made. The coordinator of advisors was to provide help for teachers who were experiencing problems with their advisory role or with individual student advisees. One of the coordinator's

main purposes was to assist in strengthening the advisor role which was viewed as a crucial one in this school. The return to the appointment of department heads was necessitated because of the apparent need for better communication within subject matter fields. Effective communication within departments was considered to be essential for the proper development of learning packages and other processes associated with objective based education. To increase the in-school time devoted to the advisor role, teachers agreed to extend their day from eight periods to nine. Substantial revamping of learning package material was instituted in the period preceding the first semester of the 1975-1976 school year, creating an additional demand upon the staff's time.

INFLUENCES UPON PRESENT STAFFING PRACTICES

The study attempted to identify the major influences upon present staffing practices. The ideas discussed in this section complement those outlined in the previous section of the report.

Desire To Offer an Individualized Learning Program

The subject requirements and credit arrangements are the same as for all other high schools in Alberta and reflect a fundamental belief that individual students have different abilities and needs. To cater for these differences the school offers an approach that exemplifies the philosophy of continuous progress education. The key variable in this approach is time, not academic grades, so students are given the opportunity to progress at their own rate and to learn in a manner appropriate to them.

The common first year provides students with an opportunity to identify their own interests and needs while ensuring that all students will have the necessary prerequisites for courses they choose in subsequent years of their program.

Programs are general patterns followed by students. Each program is divided into specific subjects and subject levels. All subjects have required classes which are listed on the timetable, but as long as the student is displaying reasonable progress, he has considerable choice as to where he spends his independent study time. Most learning guides also allow students to choose how they learn. Some prefer to do the prescribed readings and others prefer to learn from the audio-visual materials available. In all cases, the learning materials are supplemented by individual teacher help, small group tutorials and large group lectures. Students meet the unit objectives by following the components of the specified learning guides and by satisfactorily meeting the evaluation requirements of 80% on all tests and assignments related to the compulsory section of the course. All

courses consist of two main sections, named CORE and QUEST.

CORE is the compulsory section of a course and consists of the most important principles and concepts prescribed by the Department of Education. QUEST is the optional student-initiated part of each course. For each learning package a 'B' mark is awarded to students who successfully complete the CORE while an 'A' mark is given to students who successfully complete QUEST. At the conclusion of the course the marks achieved on each of the learning packages are converted to a final percentage grade. Course completion need not coincide with the end of a semester.

Students are able to begin course work on any day of the school year. There are no fixed entry dates for new students. Students coming from another high school are evaluated by pre-testing and an appraisal of their previous work as well as their progress reports and records.

The work completed at another institution is matched to the student's program outline and the appropriate credit is given. Care is taken to ensure that supervision is maintained until the student has adjusted to the idea of individualized self-directed study and the responsibility it entails.

Desire To Offer a Varied Extracurricular Program

The school has a very extensive program of extracurricular and cocurricular activities to assist in developing the social and physical skills of students. Every teacher typically sponsors at least one activity, consequently the school is able to offer over forty different team or club opportunities. Activities are grouped into four categories: major athletic teams, minor athletic teams and clubs, non-athletic clubs and miscellaneous school activities.

Desire To Personalize the Learning Environment

In an effort to personalize the learning environment the emphasis has been on creating an organizational structure which would result in greater contact between teachers and students. The structure was designed to give teachers greater opportunity to interact with individual students and give students greater access to teachers. The advisor function is the third aspect of the teacher's role.

The development of a role involving instruction, supervision of extracurricular activities and advising students, has been supported by determined efforts to select personnel who demonstrate a desire to relate to students in a personal and helpful manner. The tendency has been for staff members who found difficulty in performing these three functions to move elsewhere. As a result, the present staff is one which

seems to be highly committed to the school's goals.

Community Influences

The successful implementation of the program can be attributed in part to the supportive attitude which the school board holds toward the school's newer practices. The attitude of the board is due, in no small measure, to the understanding shown by its present chairman, who, as former principal of the school, is well versed on the problems of the area and the approaches needed to resolve these problems.

Attempts to gain community support by establishing a greater degree of contact and interaction with the parents of attending students have not been very successful. The school's administrative staff is seeking means to improve the situation. The school offers parents four opportunities during the year when they may meet with their child's advisor. A recent attempt to generate more parent interest in the school has been the introduction of a weekly Parent Activity Night. Once a week school facilities and some school staff are available to the community at large. Parents are encouraged to enroll in arts and crafts, industrial arts and other classes of interest to them. It is somewhat premature to assess whether these attempts will generate the anticipated community support.

EXPECTED AND PERCEIVED OUTCOMES

A school brochure for use with parents and prospective students presents the following four general objectives which the program offerings are designed to achieve: (1) to meet the individual needs of the students; (2) to develop a sense of responsibility in students; (3) to maintain high academic standards; and (4) to maximize the involvement of students in a broad cocurricular program.

The extent to which each individual objective of the school has been achieved was discussed in interviews with the administrative staff, teachers and paraprofessionals, and several students. Impressions gained in these interviews are recorded in the three sections which follow.

Outcomes as Perceived by the Administrative Staff

The particular method of staff utilization in the school is perceived to introduce a greater degree of flexibility than is common in a more conventional high school. The differentiation of staff roles, discussed earlier, was expected to accommodate better the changing needs that arise within the school. As a result of this differentiation,

particular outcomes are envisaged for staff. The new emphasis given to the three functions performed by teachers, namely, instructing, supervising extracurricular activities, and advising students is expected to increase professionalism among teachers. In relation to the new instructional role the assignment to teacher aides of clerical work characteristically associated with teaching and the removal of much of the repetition which permeates normal day-to-day lesson planning have created more time for other activities. For example, teachers spend more time on curriculum building in the form of developing learning packages and evaluating and upgrading them.

The advisor function is expected to increase student-teacher contact and to improve relationships between teachers and students. It is viewed as a mechanism to convey student ideas to the school's decision makers and thereby reshape the school's objectives.

Teacher involvement in extracurricular activities supplements teacher-student contact associated with advising and allows the teacher to develop a sensitivity to important non-academic aspects of student growth.

This staff differentiation is expected to result in benefits for the student. The administrators feel that the somewhat unique program of the school will bring additional advantages to the student. The program aims at improving the academic achievement of all students by offering a basic course load (CORE) supplemented by a program offering scope enough to cater to students who show a high interest and ability (QUEST). The intent is to create a program which will accommodate all types of students. Further, the program at the school allows each student to gauge his own progress. Because teachers now have standards by which to judge student progress, namely "mastery learning," they can now be held more responsible to students and parents than they would otherwise be.

The aide program is viewed as an essential componeht of the school's operation. A satisfactory balance has been achieved between the number of teachers and the number of aides. No expansion of their numbers or their roles is envisaged except for the creation of the position of aide for the business education learning centre. At present, the balance between numbers of teachers and aides is contingent upon the ratio of an aide's salary to a teacher's salary considered in conjunction with the need for the type of services each provides and the "trade offs" which have to be made. As the salary of aides increases a tendency to hire fewer aides may develop. Conversely, a decrease in the ratio may encourage the hiring of more aides.

Administrative staff felt that allowing teachers to specialize to a degree greater than is presently permitted in one of the three major functions of teachers, for example, advising more students and spending less time on instruction, or the reverse, may contribute

to more effective utilization of staff talents and better student progress.

Outcomes Expressed by Teachers and Paraprofessionals

Teachers perceived that despite the presence of paid paraprofessional staff in the school the general functions which teachers perform have not changed markedly. For example, in the areas of instruction, extracurricular activities, supervision, planning and emotional development, the presence of aides was perceived not to have significantly altered the tasks performed by teachers. However, teachers believe that some changes have occurred in the way that the clerical, audio-visual, laboratory and intra-school communications are performed. Furthermore, teachers seemed content with this pattern of use of aide services and did not identify any desired changes. The aides' responses tended to support the position of the teachers. Aides in general felt that their actual deployment corresponded with the expectations they held for their role.

Teachers were adamant that paraprofessionals not perform instructional tasks, but they were prepared to accept a greater involvement of aides in the supervision of students. Teachers rated all categories of aides high in terms of their knowledge, skills, value, reliability and interpersonal relationships. The majority of teachers felt that a ratio of three teachers to two paid aides could best serve the needs of Winston Churchill High School. Teacher aides have assigned duties which they perform during predetermined periods of time. Assistance to teachers does not fall into any rigid pattern of time allocation. That is, aides are not assigned to particular teachers for blocks of time. Teacher usage depends upon access to the aides and the teacher's need for their service.

Outcomes Expresses by Students

Most students perceived that little or no conventional classroom instruction as such occurred in the school, but that instruction was offered in small-group sessions where individual and group assistance on learning guides was given by the teacher. A few students claimed that conventional classroom instruction was given by their teachers. Both groups of students felt that the mode of instruction used with them was what they preferred.

The school used large-group instructional sessions to serve as a motivational device for the QUEST program which supplements the regular CORE program. All students are expected to attend twenty-five of the large-group sessions a year. However, many students fail to see the purpose of these sessions and consider them unimportant. Students in Grades 11 and 12 reported that they could not afford the time to attend these sessions due to their heavy class schedules.

Under the present structure most students have five instructional periods and four preparation or study periods during the nine-period day. Therefore, a good deal of time is spent in preparation and if a student encounters a problem he may attempt to seek instructional help. Outside of the scheduled classes instructional help can be difficult to obtain. For example, the desired teacher may be teaching. The alternative for the student is to seek assistance from another teacher of the same subject-matter field who is not teaching. Teachers are loosely organized into learning teams; instructional assistance can generally be given if the regular teacher is unavailable. When instructional assistance is not available the student may choose to seek his advisor, consult with a classmate or an aide, or postpone the search for help until the desired teacher can be consulted. Students reported that in some cases, when help was not immediately available, they took the attitude, "forget-it."

Students seek guidance from either their assigned advisor or in cases of extreme concern with the guidance counsellor. Most students see their advisor four times a day for the purpose of keeping a record of attendance. Usually a scheduled weekly meeting with the advisor is also arranged for each student. At these meetings the student's short-and long-term goals are discussed, progress on course work is reviewed, and attempts are made to identify and resolve the student's academic and/or personal problems. The teacher keeps abreast of the student's progress by referring to information supplied to him by the student's course instructors.

On the day that student log-books were distributed by the study team, students recorded in them that approximately ten to twenty minutes were spent in discussing course related problems with individual teachers. A similar amount of time was spent in consultation with their advisor. Student logs revealed that time devoted to non-educational matters varied between 20 and 270 minutes. For most students the time devoted to non-educational matters averaged 100 minutes, including their lunch break.

Most students reported general satisfaction with the range of courses offered in the school Students did recognize that if a needed course was not available in the school a student could take it at another high school if his/her timetable permitted. Another problem some students faced when they finished a particular course was that the course they wished to enter was at capacity. Individuals would then have to choose either to wait until someone completed the course to allow for a new entry, or attempt to change their program.

The majority of the students seemed to feel that the learning-centre aides and general aides were there to help the teachers. However, these aides were perceived by students to be of help to them in the following ways: providing access to learning guides and other materials, helping students interpret the instructions and content of the learning guides, checking student attendance when the advisor was

indisposed, helping students to locate their advisor or teacher, and administering tests in the testing centre. Aides were not perceived by students to be carrying out an "instructional function."

Most of the students who were contacted by the study team suggested that their relationships with all aides were good. Some students said they discussed their personal problems with aides they liked. Students unanimously agreed that aides perform a supervisory role, and expressed no bitterness whenever learning centre aides reprimanded them for disrupting the study area. With the exception of a few students who suggested that the aides monitored and reported inappropriate behaviour to teachers, it was generally agreed that having extra adult personnel within the school did not produce added inconvenience.

INTERPRETATIONS

The information preceding this section has concentrated on a general description of the actual nature and operation of the Winston Churchill High School. In this section the study team analyzes the operation of the school and makes comments and recommendations which other school jurisdictions might consider before adopting programs such as the one used at Winston Churchill.

Professional Staff

Teachers at the school were very relaxed in their relationships with each other and with students. Their manner conveyed an attitude of general satisfaction with the way administrative details and communications were handled. The very convivial climate of the school indicates that the emphasis upon social and personal relationships is helping to maintain a good learning environment. In situations where teachers have designated responsibilities such as the three at Winston Churchill, some semblance of equity of teacher workloads must be maintained. Consideration must be given to preparation requirements, marking loads, advising loads and other professional responsibilities to prevent teacher dissatisfaction.

The balancing of the number of aides to teachers should not be made solely on the basis of economic criteria. Careful evaluation should be performed concerning the specific function which each type of position can provide and the need for their respective services. Only then can "trade-offs" between different types of staff be realistically made without compromising the quality of education being provided.

Student Aides

Most student aides were assigned tasks which were somewhat remotely related to instruction. Although students found the monetary reward desirable, it might be more beneficial for all concerned if the student aide program centred more on giving them some additional educational advantages for their involvement. The type of activity engaged in by the business education aide seemed to be of greater educational value to student aides than were the activities of the reading room or cafeteria assistants.

Paraprofessional Staff

The practice of allowing the school to hire paraprofessionals seems to be worth preserving. Value can be seen in having aides carry out supervisory functions, but to avoid the role conflict that has apparently developed for some aides the supervisory role might be more heavily emphasized during the job interview. People who are willing and able to supervise can be hired rather than having to solve the problem by changing the job description as some aides suggest.

It is difficult and perhaps undesirable to totally prevent aides from assisting with instruction. In some cases students accept such help as legitimate and necessary. Assistance that the aides were seen to provide tended to be "low-key instruction" usually taking the form of friendly advice to the students. This type of interaction seemed to reinforce positive relationships between students and aides. However, any moves to increase such aide-student interaction should give consideration to ATA policy on aides.

Students

The students at Winston Churchill High School have casual and friendly relationships with most of the professional and paraprofessional staff. Much student movement to and from various activities was characteristic of the school, and students were often conspicuously outside the classroom during "scheduled class times." This type of constant activity may exacerbate the students' problem of finding a quiet study area.

A number of complex problems are a direct result of the flexible program. The high-ability student makes rapid progress in this program and the disadvantaged learners encounter less pressure than they would in a conventional school. The school's program possibly places average students at a disadvantage encouraging them to "take it easier" than they might at another school. A few students managed to complete as little as 13 credits in a school year while others, who were either carrying over work from another semester or trying to catch-up, were attempting to complete 50 or more credits in a year. Students who

were really pressured to make up work often resorted to short-cutting the learning package work, or sought others to help them find what was on the unit tests. The credibility of an objective testing program could be jeopardized when this type of problem arises even though alternative tests are provided.

Program Implications of Staffing Practices

Students often find that moving into an unfamilar situation is somewhat unsettling. Educational leaders therefore have a responsibility to minimize the disruption for students during the transition to high school by reducing the disparity in staffing practices and approaches used by the senior and junior high schools. In Lethbridge, an ad hoc committee is examining the practices of Winston Churchill for their relevance and possible adoption by other schools in the city. This speaks well for the program. However, giving students the option to choose among different educational programs has benefits; the wholesale adoption of individualized programs might be undesirable.

If a particular method of staffing is considered for adoption care must be taken to ensure that the approach to be used will cater primarily to students' needs. Any staffing practice, especially one related to an individualized program must guarantee students reasonable access to teachers. If the student is left alone too much of the time the effectiveness of the program may be compromised.

Organizational Procedures

Organizations tend to reflect the qualities and characteristics of the leaders. The organization used at this school is not hierarchical and, depending on the tasks performed, a given individual may be responsible to a number of others. In this particular situation the exercise of skill and diplomacy by the administrative staff is essential to maintain effective operation of the school. The people in key leadership positions must complement each other. A person with an authoritarian outlook or a strong desire to control every facet of the school would probably be unsuccessful in an organization like the one at Winston Churchill.

SOME GENERALIZATIONS

This section presents some generalizations and comments based upon the individual school descriptions presented above.

Professional Staff

One obvious conclusion was that little differentiation of functions performed by teachers occurred in these ten schools. That is, teachers still tend to perform a wide variety of activities rather than be allocated specific responsibilities, such as development of curriculum, collection of materials, and evaluation of pupil progress, which would considerably reduce the instructional load of some teachers. Even in those schools where aides were employed to assist teachers in the classroom and elsewhere, teachers still performed a wide variety of functions. However, the presence of aides was perceived by teachers to have substantially reduced the involvement of teachers in non-instructional tasks and to have increased their involvement in other functions such as planning.

Those schools which are currently organized on the basis of teams of educators and aides do have potential for greater differentiation; one principal expressed the hope that this would soon occur. Staff were generally enthusiastic about their work in teams, and although teaming placed more demands on their time, they liked the autonomy and involvement in decision-making.

Greater emphasis is now being placed upon advising and counselling high-school students: this has partly resulted from semestering and a wider choice of options. Rather than handling this demand by increasing differentiation of staff, i.e. by appointing more counsellors, in several schools the teachers have been classified as "teacher-advisors" and a greater counselling load is being undertaken by administrators, particularly the assistant principals. In one school though, teachers were critical of the isolation in which such counselling occurred, as this occasionally led to inappropriate course selection, a difficulty which could have been avoided had subject teachers been able to provide input into the decisions.

The one private school, Strathcona-Tweedsmuir, provided an interesting contrast to some of the others, particularly with respect to staff retention. Most of that school's original staff of 1971 have been retained, and the factors of commitment and the propect of a career which includes monetary reimbursement for above-average service have probably contributed to such retention. In addition, the assignment of administrative responsibilities to half of the teachers has dispersed authority to a degree which is much higher than average, leading to increasing staff satisfaction.

In the elementary schools particularly, widespread concern exists about the best means by which children who have reading difficulties can

be assisted. This concern includes recognition, diagnosis and remediation. Most elementary teachers attempt to perform all three functions, but because of the detailed knowledge involved and the number of students in each class, some teachers need to resort to help from other people. Schools in which additional help is available through resource-room teachers, teacher aides, volunteer parents or cross-age grouping generally find this help to be extremely valuable. However, even with this additional in-school help, some children require more specialized services than are available in schools, and the need for external assistance must be recognized.

Paraprofessional Staff

All ten schools employed paraprofessional staff, which was defined as including teacher aides (clerical, instructional and general), office staff, and laboratory and shop assistants. Some schools had staffing arrangements in which instructional aides had been hired rather than teachers partly in order to increase the ratio of adults to students. Both teachers and teacher aides were generally enthusiastic about the work done by aides. However, some aides felt restricted by employment requirements that limited their involvement in instructional activities. Because of their high level of education, they considered that their abilities could be better utilized.

As school programs become more diversified, the employment of aides becomes more widespread, and the range of activities that aides perform is enlarged, greater attention will need to be given to their selection, preparation, and role prescriptions, and to clarification of these prescriptions among interested groups. Classification and salary schedules which recognize both qualifications and experience, and which allow pursuit of a satisfying career as an aide, should be investigated. The preparation of teachers to work effectively with aides should also be considered. Some difficulties in employing the desired number of aides may soon be encountered if the salaries of aides increase more rapidly than do those of teachers.

The use of Indian aides in schools which enroll a high percentage of Indian students is invaluable. This practice is helping to bridge language barriers and cultural gaps. Educators and the researchers perceive that the native students are obtaining considerable benefit. The aides also benefit in that their employment helps them to think about further studies and raises their self-confidence. However, the practice of employing counsellor aides without simultaneously having available a qualified counsellor or counsellors to whom they are responsible appears to be of questionable value.

Adult Volunteers

Some of the schools, particularly at the elementary level, have made extensive use of adult volunteers in a variety of ways which have enriched the education program. In comparison with paraprofessionals which are usually employed equitably throughout a school system, the use of adult volunteers in a school seems to depend very heavily upon the wishes of the

principal. Where a principal is enthusiastic, the opportunities for use of these volunteers in an elementary school are very extensive. Care needs to be taken in the provision of thorough orientation sessions for both the volunteers and teachers, as difficulties occur if role expectations and ethical positions are not thoroughly understood. Lack of continuity of service provided by volunteers can produce some problems for teachers, in that they may not be able to rely upon permanent help in the same way that they can from paid paraprofessionals.

Most adult volunteers view their involvement, whether regular or spasmodic, very favorably and usually wish that more parents could become interested. For some mothers, it represents their first work outside the home since the birth of their children. Some reported that they had obtained confidence in their ability to work productively and that they may seek more regular paid employment. The parents have gained a better knowledge of the school's operation, achievements and problems, and a more rewarding school-community relationship can result. Unfortunately, those schools in lower socio-economic areas, with the greater need of increased adult assistance, have a smaller pool of volunteers from which to draw. Possibly such schools could receive more preferential allocations of paraprofessional staff.

Some administrators felt that teachers frequently refused the offer of the services of adult volunteers because they were unsure about how they could best be used. Greater use could possibly be made of volunteers if teachers were better informed about how they can be used and about the skills of particular volunteers. Because coordination of volunteer services is essential and does take time, benefit exists in assigning such coordination to an employed paraprofessional or to a staff member such as a teacher-librarian who works closely with a number of volunteers.

Student Volunteers

A decision was made initially not to include descriptions of the activities of student volunteers working on tasks in their own schools, because this practice is very commonly used. Nevertheless, as noted in the descriptions, some schools have formalized such activities to a considerable extent, even to recognizing them as Work Experience Programs.

The cross-age tutoring programs, in which older students tutor younger students who are often in a different school, are usually viewed favorably. The Grade 9 option in which junior high students undertake a variety of tasks in an elementary school is commonly of less value: participating students should be carefully screened and the host school should ensure that they are only assigned to activities with an educational value. The same criticism could be directed at the experiences of some senior high students.

Antecedents of Staffing Practices

The deployment of professional teaching staff in various ways in the schools described seems to have occurred largely in response to the needs of particular instructional programs, rather than from a conscious effort to set up a particular type of staffing structure. Therefore, individual schools can have considerable influence over their own internal staffing arrangements, within the constraints resulting from factors such as school design, school district funding, and legal requirements. Some arrangements were established by school boards or their central office staff, but continuation obviously depends upon the commitment and interest of the school staff. Encouragement of adult and student volunteers is also seen to have depended heavily upon the school staff, especially the principal.

With respect to employment of teacher aides, most of the incentive appears to have come from schools, but their employment is based on a system-wide distribution. Some school systems, notably the Calgary Roman Catholic Separate School District, have taken the initiative and introduced extensive use of aides in individual schools. The establishment of the provincial Educational Opportunities Fund allowed some systems to employ more aides, as well as other staff.

Present Influences upon Staffing Practices

Based upon these school descriptions, the major influences upon staffing practices which can presently be used in Alberta schools appear to be as follows:

(1) wishes of the principal and school staff;

(2) policies of the school board;

(3) needs of pupils;

(4) educational programs in the school;

(5) funding available from the provincial and federal governments and from the school board, both basic and for special projects;

(6) policies of the ATA;

(7) wishes of the school community;

(8) tradition;

(9) expectations of the total educational community;

(10) availability of student teachers and teacher interns;

(11) availability of adult and student volunteers;

(12) practices used in other school jurisdictions;

(13) school affiliation—public or private; and

(14) training and expertise of professional and paraprofessional staff.

Educators wishing to implement greater differentiation of staff in their schools should be aware of these influences. They should also recognize that this greater differentiation would usually be introduced in response to some other practice (such as particular programs) or need (such as provision of expertise), rather than simply from the wish to differentiate further. While admitting that the influences listed above can be substantial constraints, the researchers gained the impression that individual schools have greater freedom to implement staffing and other changes than they commonly recognize or acknowledge. Many more schools in Alberta probably could benefit from total or partial adoption of some of the practices which occur in the ten schools.

CHAPTER 7

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Differentiated staffing has been a topic of interest to Canadian schools since its development in the mid-1960's. The early diverse definitions of the concept contributed to the arguments and lack of consensus about the worth of differentiated staffing. It is now generally accepted to be an organizational attempt to improve instruction through reorganization of personnel and reallocation of tasks, with both professional and paraprofessional staff differing in their responsibilities, functions and, sometimes, salaries.

The idea of differentiated staffing was first introduced at a time of teacher shortages but it seems to be viable under a great range of conditions. Certain aspects associated with differentiated staffing, such as collegial decision making and shifting non-instructional duties away from teachers, are being introduced into schools at a time when teachers are increasingly vociferous about their professional status.

In general, parents and society at large are becoming increasingly interested in what is happening in schools. At the same time, through the deployment of paraprofessionals, differentiated staffing has provided an avenue for the utilization of the services of those people who are interested in working in schools. Of all the aspects of differentiated staffing, this one has been perhaps the most accepted, pervasive and successful.

Financial incentives to adopt differentiated staffing practices, such as those from the U.S. Office of Education, were generally lacking in Canada at both the federal and provincial levels. Yet, a number of

schools across the country have adopted at least some aspects of differentiated staffing. Figures from Statistics Canada surveys of other Western Canadian provinces suggest that staffing patterns with extensive utilization of paraprofessional staff may also be present in Alberta. To date, however, data on staffing practices in Alberta schools have been sporadic and limited. The present study examined alternative staffing practices which have developed in various parts of the province in order to explore the extent of and potential for differentiated staffing in Alberta schools. This chapter contains a summary of the literature review, the research methodology and major findings of the study, and the conclusions and recommendations arising from these data.

SURVEY OF RELATED LITERATURE

Since the major development of the concept of differentiated staffing was in the United States, most of the literature deals with attempts to implement it in that country. Canadian literature on the topic was also reviewed.

Definitions of Differentiated Staffing

From the various definitions first proposed, differentiated staffing is now generally accepted to be an organizational attempt to improve instruction through reorganization of the teaching functions within a school so that together professional and paraprofessional staff perform all functions traditionally assigned to the classroom teacher. The extent of differentiation within each of these staffing categories may be based on any combination of responsibility, skill, functions, or salary.

There is no single model that encompasses all aspects of the concept. Yet, the premises that teachers differ in their teaching skills and the extent of their personal commitment to teaching, and that teaching is an omnibus role including many non-professional tasks are basic to all models.

The concept of differentiated staffing was developed in response to the following factors: recognition of the omnibus role of teaching; increased financial restraints; the impact of new content, curricula and teaching methods; teachers' desire for increased participation in decision making; and societal concerns about the quality of instruction in schools.

Differentiated Staffing in Practice

The first generation models of differentiated staffing varied in the reasons given for implementation and in the aspects of differentiated staffing chosen. One of the earliest models was the Trump Plan for the Model Schools project which was based on the utilization of paraprofessionals, development of a career line within teaching and

recognition of differences in teaching skills. The Temple City models had a strongly economic rationale which included the increased control of staffing costs, federal funding, the elimination of one salary schedule for all staff and the inclusion of paraprofessionals. Characteristics of these Temple City models were a teacher hierarchy based on competence and an increase in the adult-student ratio obtained at minimum cost.

Second generation models stressed the importance of needs assessment, the linking of the model to stated objectives and evaluation of outcomes. Teacher differentiation was horizontal rather than vertical and based on aspects of the teaching function. Both the Sarasota, Florida and Mesa, Arizona models utilized paraprofessionals, with the Sarasota model allocating all staff on the basis of a county-wide formula.

English (1972:109) has suggested that future differentiated staffing models would place greater emphasis on individual teaching styles and their compatability with students' learning styles.

Many of the major differentiated staffing projects in the United States have been influenced by the funding requirements of the U.S. Office of Education. A general examination of twenty projects, many of which were not federally funded, showed two common characteristics: team teaching and utilization of paraprofessionals. Most involved teacher hierarchies, flexible scheduling, and extensive teacher participation in school decision making.

Evaluation of Differentiated Staffing Projects

The few reported research studies which have examined student achievement in relation to differentiated staffing were all completed in elementary schools. In general, there were no statistically significant differences in the academic achievements of students in schools with differentiated staffing and students in control schools with traditional staffing patterns. Two studies concluded that training for staff on role status and concommitant responsibilities was essential.

Studies on the impact of changes in the learning environment concluded that, in comparison with control schools, there was a greater involvement of students in learning, and more positive attitudes towards peer collaboration and change in teachers.

Five studies examined teacher and administrator satisfaction with differentiated staffing. In general, teacher morale was high, and satisfaction was expressed with the following aspects of differentiated staffing: staff involvement in decision-making; career opportunities; curriculum development; using teacher talents and abilities; and staff relations. One study concluded that while organizational changes were not difficult to make, schools were less able to change basic organizational beliefs, attitudes and values.

Cost Considerations

The major costs in differentiated staffing projects were in the planning, development and implementation stages. Important cost factors included in-service training for all categories of personnel, instructional materials, evaluation, project coordination, and the conversion of buildings. Operating costs were difficult to determine but were generally reported to be approximately equal to those of traditionally staffed schools except where there was no reduction in the number of certificated personnel.

Implementation of Differentiated Staffing

Studies of teachers' attitudes towards differentiated staffing indicate that administrators were generally more positive towards differentiated staffing than were teachers; that males were more positive than females; that secondary teachers were more positive than elementary teachers; and that as level of education or extent of involvement in differentiated staffing increased, so did the favorable reactions towards differentiated staffing.

Planning Procedures

Apart from the factors which apply to planning and implementing any change in education, important considerations mentioned in many studies were the extent of involvement of personnel and community in determining the rationale and objectives and the importance of the involvement of teachers in decision making.

Problems occurred either when the project was tightly controlled by school or central office administrators to minimize opposition in the planning and design phases or when the initiating group did not recognize the strain in ideology between independent teacher governance in schools and the strategy of directed change.

The Canadian Experience

In Canada, both the extent and form of differentiated staffing differ from those developed in the United States. While the guidelines associated with U.S. federal funding shaped to a large extent the features of American differentiated staffing projects, Canadian projects have been almost exclusively developed in response to local needs. Although this has encouraged wide variation in the features of differentiated staffing adopted, certain commonalities are evident. All projects had as their first commitment the improvement of instruction through individualization of students' programs. Many reorganized curriculum content areas, and placed teaching teams in charge of "families" of approximately 150 to 300 students. All projects used the services of

paraprofessionals and/or volunteers, and some implemented extensive student-tutor programs.

Employment of paraprofessionals. Beginning in the early 1960's, the numbers of paid paraprofessionals in schools have increased rapidly. This has been due to several factors including economic conditions during a time of teacher shortage and demands for the reduction of non-instructional duties by increasingly better-qualified teachers.

The duties of teacher aides in the main have been non-instructional, with an emphasis on clerical and supervisory tasks and on assisting the teacher in the classroom.

Studies on teacher aide utilization have stressed the necessity of training for both aides and teachers. While the presence of aides did not influence the academic achievement of students, their services were regarded by teachers as essential.

Volunteers. There are no accurate figures on the numbers of volunteers in schools, but studies of particular situations seem to indicate that their duties are similar to those of paid teacher aides.

RESEARCH DESIGN

The study sought to determine the extent of differentiated staffing practices in Alberta schools and school systems.

A preliminary questionnaire was mailed to all superintendents in the province requesting information about specific professional, paraprofessional and volunteer staffing categories and the numbers of these personnel involved. Superintendents were also asked to indicate schools which they felt had staffing patterns that differed markedly from traditional staffing arrangements.

A second questionnaire surveyed a sample of Alberta schools and school staffs to obtain specific staffing information and data on teacher attitudes towards alternative staffing practices.

Relevant provincial legislation was examined and representatives from three major educational organizations, the Alberta Department of Education, the Alberta Teachers' Association and the Alberta School Trustees Association, were interviewed concerning this legislation, the policies of their respective organizations and the opinions of their members concerning various aspects of differentiated staffing.

The most intensive data collection was at the school level. Ten schools which had implemented aspects of differentiated staffing were examined and their staffs interviewed in order to describe the practices in operation, and to ascertain antecedents to, restrictions on, and anticipated and unanticipated outcomes of the differentiated staffing practices in each school.

FINDINGS OF THE SURVEY OF SUPERINTENDENTS

The survey of school superintendents in Alberta sought information with respect to differentiated staffing and the utilization of professional, paraprofessional and volunteer personnel in the school systems of the province. The findings reported in Chapter 3 reflect the responses of 86 superintendents with responsibilities for 116 of the province's 141 school jurisdictions.

The more formal definitions of differentiated staffing enunciated in the literature review were not found in any school jurisdiction but there was a range of staff utilization throughout the province. Common examples of school organization which had some of the components of differentiated staffing were large group instruction, team teaching, departmentalization, and the use of various categories of paid and volunteer paraprofessional personnel.

The complete absence of Master Teachers and the small reported number of Team Teaching Leaders may be the result of conscious efforts to adapt the more sophisticated models of differentiated staffing, which would include these two categories, to the needs of this Province. This absence of formally-designated positions may in part reflect the present attitude of the Alberta Teachers' Association toward a pyramidal structure of school organization. As one superintendent pointed out, the reduction in the number of team teaching leaders was a direct outcome of a controversy between the ATA and a school board. The overall examination of professional staffing categories in Alberta suggests an emphasis on collegial-professional relationships among teachers, as implied in the designation "subject area consultant/coordinator," and not on administrative/supervisory positions.

The most widely used categories of school-based professional personnel were resource teachers, school counsellors, and remedial teachers. One percent or less of all schools were reported as having the following categories: Master Teachers, Team Teaching Leaders, Psychologists, Community School Directors and AV Directors. However, the questionnaire sought information with respect to school-based personnel and it cannot be concluded that schools which were reported as not having the forementioned staffing categories had no access to these specialized services; such services may be provided by personnel deployed on a system-wide or regional basis.

The earliest professional category of staff differentiation to be introduced in Alberta appears to have been that of teacher-intern, which dates as far back as 1934. No new staff differentiation categories were apparently utilized until 1950 when school counsellors were appointed in some jurisdictions. In general, most staffing categories were not introduced until the 1960's and 1970's. This may reflect the renewed interest and increased funding which schools received during this period.

Superintendents also provided information with regard to additional professional staffing categories not listed on the questionnaire. These additional personnel who were frequently a reflection of local needs included reading specialists, native language teachers, teachers of English as a second language, and a religion consultant.

Of the paraprofessional and support staff categories, the most widely used was that of typists/secretaries. Three out of four schools in Alberta have some form of clerical staff. Approximately one-half of schools have library aides and two out of five have teachers' aides/ instructional aides.

The proportion of schools having library aides, laboratory aides and clerical aides was far higher in the Public and Roman Catholic Separate School Districts which are mainly urban than in the rural Counties and Divisions. On the other hand, a higher proportion of County schools than of schools in the more urban systems had supervision aides and business managers.

In this province support staff categories would seem to date back to 1931 when typist/secretaries were introduced in at least one jurisdiction. Other categories were introduced more recently from 1955 onward, with a fair concentration in the 1970's. Eight school superintendents indicated several additional categories not listed on the questionnaire. Undoubtedly this proliferation of support staff categories is related to the newer forms of funding, such as the Educational Opportunities Fund, which have been made available to school jurisdictions.

Data with respect to volunteer personnel were more difficult to obtain from jurisdictions and were of a less reliable nature. This was due in part to the local nature of volunteer help, which is arranged for by individual schools not by the district offices, and in part to a basic characteristic of voluntarism itself which lacks the stability and predictability of paid work. Yet even the tentative data that were provided did indicate a large resource of community personnel on whose time and dedication schools may and do draw. It would appear that this phenomenon of volunteer assistance in schools is of recent origin. That volunteer help does not always meet the needs of a school organization was indicated by those superintendents who changed, when funds were made available, from volunteer to paid categories.

In summary, then, Alberta school jurisdictions have moved to specialize and diversify staff roles. These attempts to utilize more fully the potential human resources available to the school reflect some aspects of the concept of differentiated staffing which have been adapted to the regional and local needs of the province.

PRINCIPALS' AND TEACHERS' RESPONSES

The survey of Alberta principals and teachers sought information about (1) present and preferred staffing practices, and (2) attitudes toward various aspects of differentiated staffing. Chapter 4 reports the findings based on the responses of 255 principals and 342 teachers, representing 80 percent of principals from a systematically selected group, 86 percent of principals from a nominated group and 55 percent of teachers sampled.

The survey indicated that about two-fifths of all respondents regularly utilized paid aides. Proportionately more principals than teachers reported that aides worked for them one hour or more per day, and proportionately more principals than teachers had aides working for them for longer periods of time.

About one in six respondents indicated that they could not effectively use the services of trained aides, while the remaining five-sixths felt they could use such services for one or more hours during an average school day. Principals with aides tended to use more aides and more aide time than did teachers who had aides. In addition, principals preferred to have about twice the total aide time preferred by teachers.

In the various sub-groups examined, most principals and teachers perceived "preparing instructional materials" as the most important activity to which aides should devote their time, and fewest perceived "planning for instruction" as the most important activity.

When indicating the type of personnel they would like to see added first to their school staff most principals, whether with or without aides, preferred master teachers and fewest preferred teacher interns. However, most teachers with aides preferred the appointment of instructional aides and fewest preferred teacher interns. Most teachers without aides preferred the appointment of clerical aides and, again, fewest preferred teacher interns.

Both principals and teachers tended to agree that professional school based personnel should have more autonomy in decisions related to curriculum, teaching methods, rules and regulations, budgeting and staffing. As might be expected, principals tended to be more concerned with the utilization and development of staff, whereas teachers tended to be more concerned with curriculum development.

The survey also indicated that teachers collaborated with other teachers and with aides to only a small degree in planning for instruction and in instructing. Not surprisingly, perhaps, teachers with aides tended to collaborate more than teachers without aides in these two areas.

With particular reference to differentiated staffing, respondents indicated mild agreement with the items measuring their willingness to participate in implementing alternative staffing patterns. Both principals and teachers tended to agree that the effectiveness of teachers could be

improved by assigning some of their present tasks to non-certificated personnel.

Both groups indicated moderately strong agreement with the notion that schools should have a better way of directly linking teacher skills to instructional responsibilities.

Overall, principals and teachers tended to agree more strongly with the above-mentioned autonomy items, with the effectiveness item, and with the link item, and less strongly with the willingness items.

LEGISLATION, POLICIES AND OPINIONS

Chapter 5 identified the Department of Education, the Alberta Teachers' Association and the Alberta School Trustees Association as three provincial organizations having a continued interest in Alberta education, and reported on the policies and dispositions of these organizations towards various aspects of school staffing. This information was gathered by analysis of the written policies of each organization, group interviews held with senior officers of each organization and the result of questionnaires completed by the officers interviewed. The following summary concentrates on information gathered during the first two of these activities.

The Department of Education

As a unit of the provincial public service, written policies of the Department of Education are for the most part contained in provincial statute and regulation. With regard to school staffing, *The School Act* assigns local school boards the authority to employ such personnel as are required but mandates that only provincially certificated teachers can be employed as teachers. However, Section 150(3) of this statute allows non-certificated but competent persons to be employed as French or other second language instructors.

During their group interview, senior Department officers perceived that the Department has not found it necessary to adopt a position on the use of teacher aides, and noted that in many cases arrangements concerning the use of teacher aides have been cooperatively developed by local boards and teachers. However, it was noted that the increased use of aides in Alberta schools will probably be limited by financial constraints faced by local boards, and be contingent on teacher support. In the latter case, the establishment of an acceptable professional teacher-pupil ratio was seen as a probable prerequisite. The Department officers also suggested that present pre-service and in-service training does not appear to equip teachers with skills to manage and supervise auxiliary staff. The differentiation of professional staff roles was not seen to be a current issue or problem. In conclusion, the officers observed that no major provincial program or thrust concerned with school staffing was anticipated by the Department of Education in the near future.

The Alberta Teachers' Association

The Alberta Teachers' Association, as the representative association of Alberta teachers, has a considerable body of written policy concerning staffing practices in Alberta schools. Those policies that relate directly to the employment and deployment of paraprofessionals propose that teachers should have control of the placement, assignment of duties, supervision and evaluation of aides, and that as teachers have total responsibility for teaching they should perform most of the instruction. Teaching activities tend to be defined in ATA policy as diagnosing and prescribing student learning needs and educational programs, implementing educational programs and evaluating results of the educational process. A number of position papers published by the ATA serve to endorse the official policies.

The two senior staff officers of the ATA interviewed indicated that, although no extant ATA policy would prevent differentiation of professional functions for members, the employment of aides by boards to replace, rather than supplement, a teacher would be contrary to ATA policy. Teachers, it was noted, may frequently perceive aides not so much as a threat to job security, but as a threat to job status, and in many instances teachers have reported adult volunteers as being involved in perceived abuses of ATA policy. ATA policy states that the specification of duties and functions of aides should be a prerogative of teachers and that these should not be specified by the Department of Education or school jurisdictions. The officers interviewed suggested that from the perspective of the ATA, the government should not be involved in the certification of aides. They added that it would be unlikely for teacher aides to be afforded membership in the ATA in the future, it being seen as desirable for aides to organize their own collective effort. The ATA officers also suggested that the present university training programs for teachers could be augmented to provide instruction in the use of aides. In conclusion, any attempt at unilateral impiementation of differentiated staffing on the provincial scale was seen as being undesirable and infeasible from the perspective of the ATA.

The Alberta School Trustees Association

As the representative association of Alberta school boards, the ASTA has a number of written policies that tend to support the concept of differentiated staffing. In particular, these policies advocate that school boards should be able to engage all staff that they consider necessary, that some instruction may be provided by non-certificated persons, and that non-certificated personnel are to be subordinate to certificated staff.

The four officers of the ASTA interviewed noted that differentiated staffing practices in Alberta schools have been adopted as a result of recommendations made by school system administrators. It was suggested that the introduction of decentralized school budgeting in several Alberta school jurisdictions had been associated with differentiated staffing practices, and that Alberta trustees would probably respond favorably to future initiatives proposing differentiated staffing patterns. Confusion regarding the denotations of "pupil-teacher ratio" and "teaching" were seen

by the ASTA officials as probably contributing to many of the problems concerning the use of aides.

These officers also observed that certification and unionization of aides would not appear to be desirable from the present perspective of their organization. The introduction of professional development programs to foster the skills and attitudes necessary to manage changes associated with the adoption of differentiated patterns of staffing was seen as being desirable, as was the maintenance of the present incremental approach to the adoption of differentiated staffing practices in Alberta.

Summary of Legislation, Policies and Opinions

In broad terms, the information gathered from these three provincial organizations allows five general observations to be made.

1. There would appear to be a growing need at the provincial level to define "teaching." The general consensus among the three provincial organizations is that this task will probably be left for resolution in the courts.

2. The introduction of preservice and inservice instruction for teachers in the use and management of aides would be considered worthwhile by all three provincial organizations.

3. The three provincial organizations would not appear to welcome at this time the implementation of a provincial certification scheme for teacher aides.

4. On the whole, differentiated staffing practices in Alberta appear to have been initiated at the local level and not as a result of direct action by the three provincial organizations.

5. The three provincial organizations have adopted an essentially conservative stance to the development of differentiated staffing in Alberta and would tend to favor maintenance of the present incremental pattern of development.

FINDINGS OF THE ON-SITE VISITS

The staffing practices of ten schools chosen from those named by superintendents and after consultation with various field personnel were examined. An attempt was made to include schools throughout Alberta, from both urban and rural jurisdictions, covering all grade levels, and including private schools.

Each school's staff differentiation practices were examined on-site and data concerning antecedents, problems and outcomes were obtained.

Of the ten schools examined, eight were located in urban areas, four served low socio-economic populations, one had a majority of Indian

students and one served children with developmental and physical handicaps.

The present staffing practices and instructional programs in each school have all been implemented since 1970. The extension of staffing categories and numbers was evident in every school, with all employing paid paraprofessionals. In most cases the funding was either from a decentralized school budget or from central office funds. In one case, however, an aide was paid from an Educational Opportunities Fund grant.

The duties of paid aides differed little from school to school. In general, they performed clerical duties, supervised students and assisted teachers in the classroom. The percentage of time spent on these tasks varied with the individual teacher, but clerical tasks absorbed the greatest proportion of their time.

Only in one instance, at Calling Lake, was the primary task of the aide identified as assisting the teacher within the classroom. Utilizing the services of the aide for clerical tasks was discouraged, since the roles of the aide as translator and cultural model was considered most important. The position of teacher aide was also considered to be a possible stepping stone to a teaching career, while at the Activity Centre aides mentioned the lack of any long-term salary schedule and career opportunities as reasons for the frequent turnover in paraprofessional staff.

Besides employing paid aides, chiefly for clerical tasks, eight schools utilized the services of adult volunteers. Their duties varied from that of assisting teachers either inside or outside the classroom to helping in the library or running a lunch program. Of the ten schools, elementary schools and those in middle to high income areas were most likely to have the services of adult volunteers. In almost every case the volunteer was female and had a child attending the school.

Student volunteers provided assistance in six schools. In one high school they were hired as paid personnel for library, clerical or cafeteria duties, and in two other high schools student volunteers received work experience credit. In two elementary schools, junior high school students provided assistance to teachers and worked with students as part of the junior high option program. Elementary students were involved in working with younger pupils within the school in one instance, and visiting elementary students played and interacted socially with the exceptional children at the Activity Centre.

Staff differentiation in its full meaning would seem to involve not only the addition of staffing categories but also the necessity of changes in curriculum and instruction, and in teacher decision-making power. Of the ten schools examined, two had developed strongly individualized programs with large and small group and individual sessions. Of these only one had introduced curriculum changes more extensive than the tailoring of course content to learning packs. In two other schools curriculum changes and individualized instruction had been introduced into specific programs. Team teaching as a method of instruction was

employed in four schools but often involved more group planning than actual instruction. Curriculum changes and the individualization of instruction have been introduced mainly at the senior high school level and in one junior high school while changes in staff instructional patterns were evident throughout the K-12 range with teachers in most schools cooperating in group planning and in some instances in team teaching.

No school had adopted the advisory board format common in U.S. examples of differentiated staffing. A near equivalent was the traditional department heads' (or equivalent) meeting, but the range of decisions open to American advisory councils was not evident in their Canadian counterparts. At most, teachers had increased their decision-making powers in the traditional areas of curriculum and instruction.

More changes were evident at the administrative level. The advent of new programs and increased student guidance in program matters encouraged the specialization of duties for administrators in several schools. However, the division of duties was more dependent on the skills of the individual administrators than on any conceptualization of administrative tasks.

The Model Schools Project at Bishop Carroll High School in Calgary seems to have directly influenced the development of two of the staffing practices. In one other case, the original thrust came from a school board member while in the remainder of the other schools either the original idea came from the principal, often in consultation with his staff, or from individual staff members. In general, where the major thrust was by the principal with the agreement of his staff, the chief innovation was most often the extension of staffing categories and the involvement of paraprofessionals both paid and volunteer in the life of the school. Where the chief impetus came from central office personnel or from staff members and principal, then more extensive changes involving curriculum and instruction and teacher decision-making power as well as the inclusion of paraprofessionals was likely.

In those schools where staff differentiation was most fully implemented, the importance of having a compatible staff who subscribed to a particular teaching and school philosophy and who identified and worked for the same educational goals was evident.

In all schools where individualization of instruction had been introduced, teachers' duties had changed. There was greater emphasis on curriculum planning and development of learning units. Teachers also spent considerable time supervising and advising students and marking and evaluating their work. In these situations, teacher aides were also more involved in supervision of students than in a regular classroom situation. Both teachers and aides were least satisfied with the supervisory aspect of this instructional technique.

The development of the teacher-advisor position was also common to a number of schools. Although most teachers subscribed to the importance of this function, many felt that the work entailed was more extensive than

the time allocated and wished for fewer advisees or more time. In one school, individual teacher preference was seen as the basis for future specialization in this area.

GENERAL FINDINGS

The major findings of the study are summarized below under three headings. In the first section are listed those pertaining to the extent of development of differentiated staffing in Alberta schools. Next are presented the findings related to school-based professional personnel. Finally, those with particular reference to the utilization of paraprofessionals in schools are summarized.

Differentiated Staffing

1. There was a general lack of knowledge about differentiated staffing and wide variation in the definitions of this concept.

2. No attempts had been made to replicate in their entirety the differentiated staffing models described in the literature.

3. There is a wide variety in the alternative staffing practices which have been introduced in the province, most of these initiated since 1970.

4. The alternative staffing practices identified were developed in response to local school or community concerns about the quality of instruction.

5. There was an absence of long-term planning and needs assessment prior to the implementation of alternative staffing patterns in the province.

6. No large scale funding programs to support the development of differentiated staffing models have been inaugurated and some alternative staffing practices have been discontinued due to financial restraints.

7. From the point of view of the three major organizations, Alberta Education, The Alberta School Trustees Association and The Alberta Teachers' Association, the present extent of staff differentiation has been based on local initiative and has not resulted from any direct action on their part.

8. The three major organizations favor continuation of the present incremental approach to future policy development on differentiated staffing.

Professional Personnel

1. There were few instances of the development of a teacher hierarchy beyond the traditional department head position and no instances of pay differentials where differences in salary were directly linked to specific instructional duties.

2. To date, the extent of differentiation of certificated personnel has been horizontal rather than vertical and based chiefly on the addition of in-school personnel specializing in individual student needs, such as resource teachers, remedial teachers and guidance counsellors, and in some instances based on instructional methods, such as small group, large group and individual instruction.

3. While few teachers collaborated with other teachers and with aides in planning and in instructing, two-thirds of teachers desired increased opportunities for collegial assistance.

4. Two-fifths of teachers were willing to participate in the implementation of alternative staffing patterns which they saw as improving the quality of instruction; the majority did not feel that alternative staffing practices would provide a better match between salaries and responsibilities.

5. While opportunities for increased teacher participation for all aspects of the school program had been implemented in some of the staffing practices studied, over two-thirds of teachers in the general survey desired greater in-school responsibility and discretion in decisions on school rules and regulations, budgeting, and staffing, as well as the traditional areas of curriculum and instructional methods.

6. In the staffing practices examined the functions of within-school administrators have become more complex and administrative roles more closely linked with the competencies of the role-incumbents.

7. Principals opted for the addition of professional staff while teachers desired that additional staff should be in one of the paraprofessional categories.

8. The three major organizations favored the introduction of preservice and inservice instruction for teachers on the role and utilization of paraprofessionals.

9. There appear to be some contradictions in the policy statements of the Alberta Teachers' Association concerning the utilization of paraprofessionals and some confusion among teachers about the interpretation of these policies.

Paraprofessional and Support Personnel

1. The addition of a paraprofessional staffing category to schools was the most widespread aspect of staff differentiation in Alberta.

2. Teachers saw the shifting of non-instructional responsibilities to paraprofessionals as improving teacher effectiveness and making better use of scarce funds.

3. Thirty-nine percent of schools employed paid teacher aides/ instructional aides and 33 percent employed paid school aides/general aides.

4. The utilization of paraprofessionals ranged from those schools with student tutors and adult volunteers to those with paid instructional assistants, counsellor aides and teacher aides.

5. The duties most commonly assigned to paraprofessionals by teachers and principals were the preparation of instructional materials and the provision of assistance to students, and they preferred that aides continue to spend most time on these and least time on planning for instruction.

6. A substantial proportion of special funding programs, especially the Educational Opportunities Fund and the Local Initiatives Project grants, has been used to pay the salaries of paraprofessional personnel.

7. At present, little has been done to develop certification procedures for paraprofessionals, to recognize formal training obtained in teacher aide programs or to unionize paraprofessionals.

8. The multiplicity of role definitions by the provincial associations, individual school boards, administrators and teachers has left many aides unclear about their role in the school.

9. There is lack of agreement between the Alberta School Trustees Association and the Alberta Teachers' Association on the granting of Ministerial Letters of Authority which allow non-certificated personnel to teach.

10. The involvement of volunteer personnel to assist in the classroom and to prepare instructional materials, which has occurred mainly in urban areas and at the elementary level, is entirely dependent upon the wishes of the principal and the nature of the school community, and causes unique problems related to task assignment and the uncertainty of the service.

11. Student volunteers were extensively used in the schools either to act as tutors or to provide paraprofessional service, without apparent consideration in some instances to the educational value of these experiences for the students involved.

CONCLUSIONS AND IMPLICATIONS

The conclusions arising from the findings of the study and their implications for Alberta education are presented here under the same three headings used above. Within each section the conclusions are first listed and then general comments and recommendations for possible action presented.

Differentiated Staffing: Conclusions

1. The general lack of knowledge about differentiated staffing has been due to a lack of (a) publicity on methods of staffing schools, (b) opportunities to visit a variety of alternatively staffed schools, and (c) direct encouragement to consider alternative ways of staffing schools to obtain a better match between teacher skills and instructional responsibilities.

2. Improving the educational experience for students has to be the primary motive for the development of alternative staffing practices and they must reflect local characteristics if the change is to be effective.

3. The lack of sufficient planning prior to implementation and the paucity of inservice programs for all personnel, on curriculum development and instructional methodologies related to the proposed staffing changes, have prevented a number of alternative staffing practices from realizing their full potential.

4. The adoption of a leadership role in support of the development of alternative staffing practices by the three provincial organizations has been hindered by their differing positions on the contingent issues of adult- versus teacher-pupil ratios, the qualifications of the personnel who are given special permission to teach, and the interpretation of "adequate supervision" of non-certificated personnel.

Differentiated Staffing: Implications

General comments deriving from the above conclusions are presented in this section in brief statements many of which contain recommendations for action at two levels, one with a provincial and regional emphasis, and the other more specifically related to school boards and individual schools.

A. Provincial and regional.

1. It is recommended that Alberta Education, The Alberta Teachers' Association, the Alberta School Trustees Association, and educators generally, foster and facilitate the development at the

local level of alternative "contingency" staffing arrangements for schools, which take into account the situational characteristics.

2. Greater recognition and publicity should be accorded to alternative staffing practices which have been successfully utilized in other Alberta schools, and elsewhere. The wide dissemination of this document containing descriptions of ten such "contingency staffing" practices is recommended as a first step.

3. A special fund to assist in planning and implementation of alternative staffing practices should be set up at the provincial level.

4. Greater recognition should be given to situational differences between school jurisdictions in the provision of funds for staffing schools.

5. The development of various blueprints for the planning and implementation of alternative staffing structures should be completed and made available for consultation by trustees, central office personnel and school staffs.

6. The three major organizations should work toward a resolution of the contingent issues of definitions of "teacher," and "teaching" instead of leaving these decisions to the courts.

7. Each organization should clarify its own policies with regard to teachers, teaching and adequate supervision of paraprofessionals.

8. Greater publicity should be given to the policies of each organization, especially in relation to teachers' specific concerns about the roles and utilization of paraprofessionals.

9. The notion of a given teacher-pupil ratio should be generally accepted as a guide to program enhancement and further that steps be taken to gradually increase the adult-pupil ratio in schools.

B. School boards and schools.

1. Greater recognition should be given to local situational factors, such as, characteristics of students, and the socio-economic setting of the school, in planning alternative "contingency" staffing patterns.

2. The impact of local situational factors should be given greater weight in the allocation of numbers and types of professional and paraprofessional personnel to schools.

3. More opportunities to visit a variety of alternatively staffed schools should be made available to in-school personnel.

4. The advantage of giving formal recognition to the notions "teacher-pupil ratio" and "adult-pupil ratio" is recognized; however, the rigid application of specific ratios is seen to have deleterious effects when staffing school jurisdictions and schools having special needs.

Professional Personnel: Conclusions

1. The development of a professional teaching hierarchy has been generally discarded in Alberta in favor of staff differentiation by curricular or instructional specialization.

2. Teachers throughout the province are ready to participate in alternative staffing practices as evidenced by their desire for greater collegial assistance, by their desire for opportunities to be involved in alternative staffing practices and by the extent of staff collaboration in many of the projects funded by the Educational Opportunities Fund grants.

3. The presence of many alternative staffing practices is associated with increased school autonomy in budgeting, staffing, curriculum development and instructional methodology.

4. Alternative staffing practices involve different administrative competencies and require a reexamination of administrative roles.

5. Teachers view the introduction of paraprofessionals to the schools as part of a general trend to redefine the duties of the professional teacher by shifting non-instructional responsibilities to paraprofessionals.

6. Lack of sufficient preservice and inservice programs on the role and utilization of teacher aides has hampered the utilization of such personnel in schools.

7. Much of the confusion about the types of duties which may be assigned to paraprofessional and to volunteer personnel has arisen from teachers' lack of knowledge of, and variety of possible interpretations given to, the policy statements of the teachers' association.

Professional Personnel: Implications

The implications and recommendations for possible action in decision areas affecting professional personnel are outlined in this section.

A. Provincial and regional.

1. Greater attention should be given to the systematic allocation of resource personnel to schools, such as reading clinicians for elementary schools, and the present emphasis on the addition of in-school personnel specializing in individual student needs should be continued.

2. The introduction of a teacher assistant or teacher intern category on a wide-scale basis and the more extensive use of student teachers are recommended since teachers have need, in their work with students, for specialized assistance which should not be assigned to unqualified personnel.

3. Instruction on the utilization of paraprofessionals should be an integral part of university preservice programs for teachers.

4. Provincial and regional workshops for central office and school-based administrative personnel should be designed, giving attention to the planning, introduction and coordination of alternative staffing patterns.

B. School boards and schools.

1. Boards should give greater recognition to the potential advantages of staffing their schools in alternative ways and should provide school staffs with more opportunities to participate in the development and implementation of alternative "contingency" staffing practices.

2. Boards and schools should give greater recognition to the need, when developing newer staffing models, for increased school and staff autonomy in budgeting, staffing, curriculum development and instructional methodology.

3. Recognition should be given to the possible limiting factor of using only one basis for assigning staff or of funding for staff and applying this uniformly to all schools within a system.

4. Boards and schools should acknowledge that the introduction of alternative staffing practices will involve greater numbers of in-school personnel in planning, organizing, coordinating and supervising, including the provision of an additional component to the teacher work-load, that of supervising paraprofessionals.

5. Greater emphasis should be given to the provision of inservice programs for all professional staff on teacher aide utilization and to the provision of in-school orientations and inservice sessions for both professional and paraprofessional staff on a regular basis.

6. Boards and schools should give recognition to the importance of adequate planning and needs assessment for the successful implementation of new staffing practices.

7. Allowance should be made for greater flexibility in the organization of administrative personnel within the school, and inservice sessions on the planning, introduction and coordination of aspects of alternative staffing patterns should be provided for administrative personnel.

Paraprofessional Personnel: Conclusions

1. Although the utilization of paraprofessionals was the most widespread and highly regarded aspect of staff differention, too few schools had access to paid aides.

2. Any expansion of paraprofessional services is severely limited by the present financial status of paraprofessional funding and the budget constraints which have been placed on school boards.

3. It is essential that the job status of some paraprofessional categories be enhanced if schools are to attract to these positions the quality of personnel which they require.

4. A lack of consensus on role definition, and ambiguity concerning their relationship with other staff members, is having a negative effect on the morale and on the performance of paraprofessionals within schools.

5. The involvement of the community, through the use of adult volunteers as resource persons, has enriched the educational programs of schools, but such personnel should not be viewed as an alternative to paid aides.

6. Junior high course options and senior high work experience programs, which involve students as tutors or teacher aides, should be examined carefully to ensure that all students involved are being provided a valuable educational experience.

Paraprofessional Personnel: Implications

Implications and recommendations for possible action in a variety of decision areas having consequences for school-based paraprofessional personnel are outlined below.

A. Provincial and regional.

1. General recognition should be given to the important contributions which paraprofessionals are making and can make to schools at all levels. Additional conditional funding for paraprofessionals should be provided.

2. The development of career lines for paraprofessionals, which include categories such as clerical aide and instructional aide outlined in the Chamchuk (1973) report, should be initiated.

3. Greater attention should be given to the development of standards for teacher aide training programs.

4. A certification program for certain categories of paraprofessionals should be developed at the provincial level.

5. Formulating a definition of non-teaching duties, rather than stressing the teaching act, is viewed as a desirable step to the fuller utilization of both professional and paraprofessional staff in the schools of the province.

B. School boards and schools.

1. Boards should continue to expand the paraprofessional services in schools and experiment with different ways of utilizing such services.

2. Task analysis of the work assigned paraprofessionals should be done in individual schools so that more comprehensive and accurate role descriptions could be provided to applicants for paraprofessional positions.

3. Recognition of formal training completed by paraprofessionals should be given in terms of assigned duties and perhaps salaries.

4. As with professional personnel, the importance of in-school orientations and inservice sessions for paraprofessional personnel is acknowledged and recommended.

5. Individual schools should continue to use adult and student volunteers where the services of such personnel prove worthwhile for all concerned; however, care must be exercised not to assign them responsibilities which require the expertise of a teacher, intern, or trained aide.

6. The extension of options and work experience programs which involve students as tutors or teacher aides should move forward cautiously, giving adequate attention to the actual as well as potential educational benefits for all students involved.

Summary of Study Implications and Potential Intervention Strategies

The findings and conclusions of the study identify several problem areas and possible courses of action related to the implementation of alternative staffing practices in Alberta. These were discussed in the preceding sections of this chapter. The major points of intervention or "action areas" identified in the study are presented in tabular form in Figure 7.1 for ease of access by decision makers and others. They were placed within the framework of organizational environments developed by Hall (1972) which was used as a general guide to data collection and analysis.

Some of these "action areas" imply needed developments in the technology of teaching and administration; some involve possible changes in legislation and policies; some appear to require a resolution of political differences; others have an economic base; and still others are specific to cultural and demographic factors. These five sets of "environmental" variables mentioned by Hall can be viewed as intervention strategies and form the vertical divisions in Figure 7.1.

Further, the "action areas" have been classified according to their general relevance to professional personnel, both teachers and administrators, and to paraprofessional personnel.

If better utilization is to be made of the varied human resources presently available or potentially available in our schools, certain actions would seem to be called for. The resolution of the problems identified by these "action areas" is seen as a challenging but not impossible task. Many of the problems and issues identified throughout the study are probably best resolved at the local level of the individual school or school board; others, such as those involving changes in law or provincial funding programs can only be resolved by action at the provincial or regional levels. For this reason, within each category in Figure 7.1 the "action areas" are separated into two additional classifications. Those having implications for, or calling for decisions by, provincial and regional educational authorities are mentioned first; ones having implications for district- and school-level decision makers are then listed.

Decision makers at the provincial and regional levels may choose to adopt intervention strategies based on one or several of the five environmental domains shown; likewise, decision makers at the school board or individual school level may take actions implied in one or more of these domains. All "action areas" are recommended for the treatment implied in the Conclusions and Implications section of this chapter, and

Staffing Categories and Decision Making Levels	Environmental Domains Affecting School Staffing Practices				
	Technological Conditions	Legal Conditions	Political Conditions	Economic Conditions	Cultural, Demographic, Social and Ecological Conditions
PROFESSIONAL PERSONNEL Provincial/ Regional	Blueprints for planning and implementing alternative staffing. Definitions of teaching, ~~teacher, intern~~ and "adequate supervision." Preservice programs on the use and supervision of paraprofessionals.	School Act definition of "teacher" Sections 73,168. Levels of training and certification required for different professionals.	Facilitation of alternative staffing. Resolution of "teacher-pupil" vs. "adult-pupil" ratios. Status of student- and intern-teachers. Policies on "teaching," "non-teaching."	Recognition of situational differences in funding for staff. Financial incentives for planning and trial of alternative staffing.	Knowledge about alternative staffing practices. Climate conducive to change in staffing practices. Information about the policies of three provincial organizations.
Boards/ Schools	Inservice programs on the use and supervision of paraprofessionals. Linking of staffing practices to curricular and instructional change. Flexibility of administrative staffing.	Collective agreements on allocation of instructional and administrative time.	System-wide policy on specialized personnel. Pressure to increase participation in decision making on staffing, budgeting, program development.	Adequate planning and "needs assessment" funds.	Impact of situational differences. Opportunities to observe many staffing practices.
PARAPROFESSIONAL PERSONNEL Provincial/ Regional	Role definitions for paid and volunteer personnel. Preservice programs for aides.	Certification. Standardization of training. Recognition of training in collective agreements.	Policies on use of paraprofessionals. Questions of certification/unionization. Career line concept (job status).	Special funding to promote use and equalize access.	Information on policies concerning paraprofessionals. Recognition of situational differences.
Boards/ Schools	Inservice programs for aides and volunteers.			Decentralized budgeting. Funding paraprofessional use.	

Figure 7.1

Points of Intervention Related to the Development of Alternative Staffing Practices in Alberta

all intervention strategies listed, technological, legal, political, economic, and social-cultural are recommended.

CONCLUDING COMMENT

Thus, while the development of alternative staffing patterns as a means towards improvement of the quality of instruction in Alberta schools is generally endorsed by parents, teachers, school boards and the three major provincial organizations, many issues remain to be settled.

Staff differentiation has become an important factor in education for several reasons. First, resulting from a recognition of inadequacies in the present program either intellectually or culturally, it has been highlighted as an alternative by teachers and parents. Other reasons for the increased differentiation which is occurring in school staffs include the impact on school board budgets of present economic conditions, the high cost of education, the increasing recognition of the professionalization of teachers and the numbers of parent volunteers who are presently utilized in schools.

Any attempt to introduce staff differentiation must take into account situational factors such as the size of the school, the grade levels involved, whether in a rural or urban setting, the environmental and cultural factors specific to the setting, the extent of community acceptance and the level of training of its teachers. Recognition must be given to the problems which are generally associated with any change and to the ensuing increase in the complexity of staffing patterns, school use, instructional materials, and utilization of time by teachers.

While research findings on the benefits of differentiated staffing practices have been generally unable to verify any substantial gain in student growth rate, they have shown no loss in the development of student learning patterns and extent of knowledge. Staff morale and teacher involvement in educational decisions have increased in situations where differentiated staffing has been introduced and, while initial planning costs may be high, general operating costs are comparable with those of schools having traditional staffing patterns.

Contingency staffing, which emphasizes the importance of local needs and constraints as the overriding factors in the development of any staffing practice, is descriptive of the variety of staffing practices in Alberta schools. The trend toward greater autonomy for principals and teachers in deciding on the alternative staffing patterns within their schools is applauded. However, the development of any alternative staffing pattern must be closely linked to instructional and program changes specifically designed to improve the quality of education in that particular school. With changes in funding and clarification of existing legislation, contingency staffing will become a viable alternative for the majority of Alberta schools.

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